

**UNIVERSIDADE FEDERAL DE SÃO PAULO  
ESCOLA PAULISTA DE POLÍTICA, ECONOMIA E NEGÓCIOS – EPPEN**

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**FOLLOWING AND BEING FOLLOWED: INSTAGRAM'S EFFECTS ON  
#MENTALHEALTH**

**Osasco**

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Trabalho de Conclusão de Curso – TCC,  
apresentado à Escola Paulista de Política,  
Economia e Negócios – EPPEN, da Universidade  
Federal de São Paulo, como requisito para  
obtenção do título de Bacharel em Administração.

Orientador: Prof. Dr. Luis Hernan Contreras  
Pinochet.

**Osasco**

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**CURSO DE GRADUAÇÃO EM ADMINISTRAÇÃO**

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**Gabriele Abrantes de Almeida**

### **FOLLOWING AND BEING FOLLOWED: INSTAGRAM'S EFFECTS ON #MENTALHEALTH**

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ao Curso de Administração da Escola  
Paulista de Política, Economia e Negócios –  
EPPEN da Universidade Federal de São  
Paulo – Unifesp como requisito para  
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*“Nothing vast enters the life of mortals without a curse.”*

(Sophocles)

## ABSTRACT

In this paper, the author sought to investigate the influence Instagram has on individuals' lives on social interaction and, consequently, the relationships of this influence with mental health during the COVID-19 pandemic. A survey was conducted with 757 respondents and its data analyzed through exploratory factor analysis and multiple linear regression. In analyzing the results, a cross-analysis of variables was performed for the descriptive part, and three multivariate phases: exploratory factor analysis, multiple regression, and analysis of the differences of means between groups. The findings pointed out that Instagram may worsen symptoms of social anxiety, loneliness, and dependence on use. Features such as posting content on Stories and use of cosmetic filters reported high incidence across mental health effects. Additionally, there is a positive correlation between some activities and behaviors involving Shopping on Instagram, Social Anxieties and Problematic Social Media Use. Generation Z and millennials presented higher Anxiety and Compulsion levels. This research contributes to developing a psychometric analysis with four scales adapted to the mental health effects evidenced in the literature. In this study, we identified the components of each of the groups of scales to analyze the relationship among Instagram functionalities and each mental health effect and identify the relationship among factors that influence them.

**Keywords:** Mental health. Social media. Instagram.

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## 1 INTRODUCTION

Nowadays, social media platforms are one of the most popular and widely used applications on the Internet (Kırcaburun et al., 2019). Also known as social networking sites (or SNSs), they are websites and applications that allow users to edit and share content with networks (i.e., friends, acquaintances, etc.) built by themselves. According to Boyd & Ellison (2007), SNSs are Internet applications that allow people to create a public or semi-public profile inside a bounded system, interact with a list of other users, and view profiles of their list of connections and those made by others within the system. SNSs revolutionized the way people interact with each other. Its usage has dramatically increased in the decade, coinciding with the rise in adults who own smartphones – thus enabling social networking to happen anytime and anywhere. Users can access social media on different platforms (mobile or computer devices) for various activities.

Social media affords multiple types of communication, enabling interactions among users through self-presentation and interpersonal exchanges (i.e., one-to-one messaging) or concurrently mass (i.e., one-to-many messaging). It can include meaningful exchanges such as messages inside social support groups or private sharing between close friends and family (Hayes et al., 2016). Although social media platforms can be used for positive purposes such as maintaining relationships, meeting new people, socializing, and informational and educational purposes, some individuals can also demonstrate problematic online behaviors that negatively impact them (Kırcaburun et al., 2019).

The Uses and Gratifications approach settles that consumers are active in their choice of media and engage with certain technologies to fulfill specific needs. In general, gratification needs guide media consumption habits. Facebook, the best-established social media platform, is geared towards having fun and knowing what is going on in one's social network, having two primary motivating factors of use: the need to belong and the need for self-presentation. Its photo-sharing and messaging functions have mainly been replaced by more specialized applications such as Instagram and Snapchat; both SNSs focused on sharing aesthetically-filtered photos or videos. Though unclear what role these images play in attending specific needs, users share photos to gratify the need for affection and attention, social influence, habit, disclosure, and information sharing (Pittman & Reich, 2016).

Initially released in 2010, Instagram was developed by entrepreneurs Kevin Systrom, an American computer programmer, and Mike Krieger, a Brazilian-American software engineer. After launching, Instagram rapidly gained popularity and was acquired by Facebook

in April 2012 for approximately US\$ 1 billion. It is now one of the most-used social platforms (figure 1), with roughly 1.2 billion monthly active users. Instagram allows them to choose whom to follow, post photos and videos, search content and products, privately message with other users, amongst various other resources. Researchers have suggested that, in contrast with other SNSs, Instagram focuses more on self-presentation and promotion than maintaining and building relationships. The primary activity on Instagram is to share photos and short videos, which involves engaging in visual self-presentation, and viewing content from others (Dumas et al., 2017).

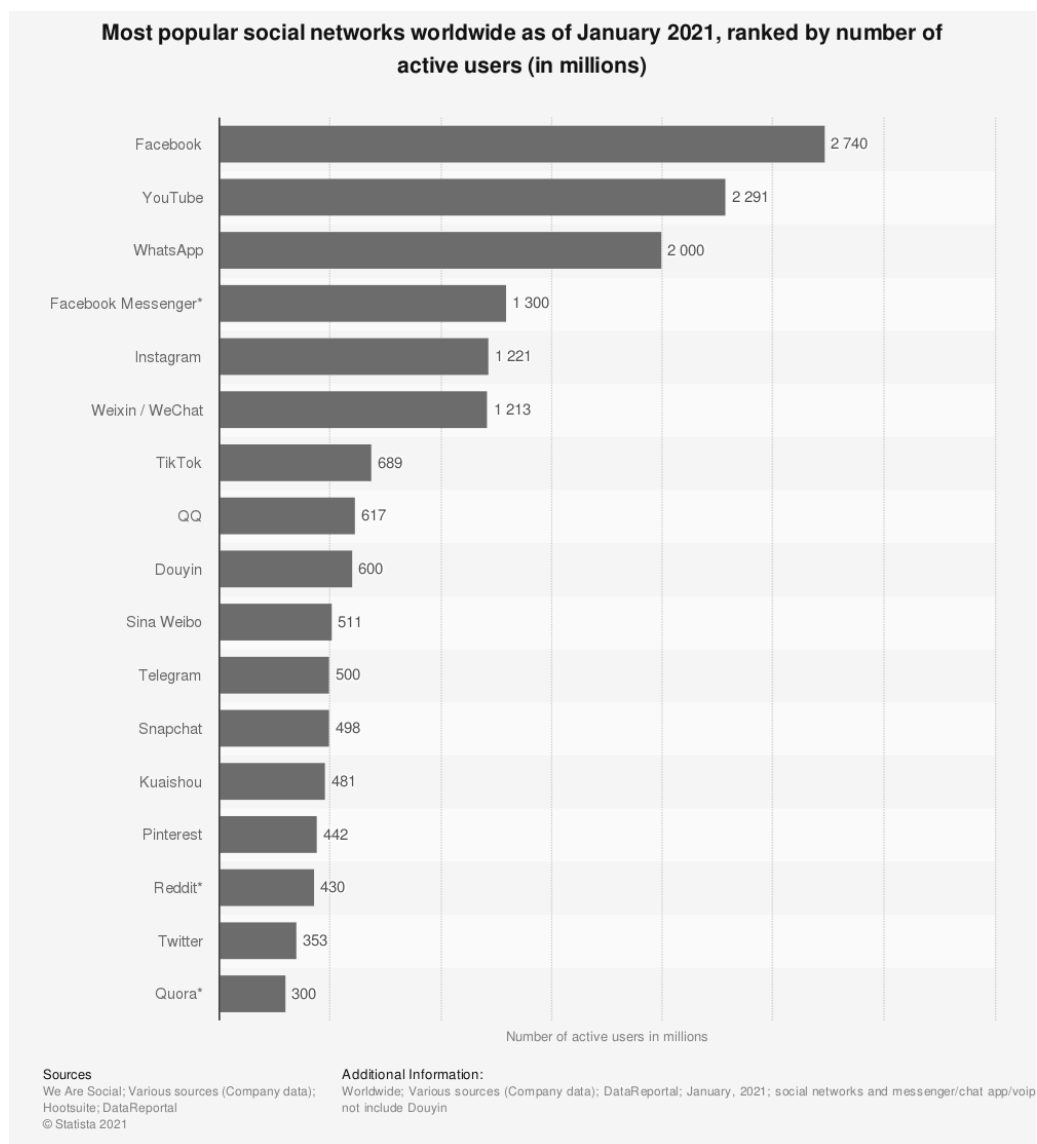


Figure 1: Ranking of social networks by popularity

Source: Statista 2021

Previous studies on social media, particularly Facebook, have yielded mixed results but mainly highlighted negative implications of passive forms of SNS use (Lup et al., 2015). Some of Instagram's features also characterize as passive SNS, making people more vulnerable to harmful mental health effects. The #StatusOfMind survey, published in 2017 by the United Kingdom's Royal Society for Public Health, reported Instagram as the most detrimental social media platform after enquiring almost 1,500 young people about issues such as anxiety, depression, loneliness, sleep, body image, bullying, fear of missing out (FOMO), and others. However, as well as other SNSs, it received positive scores for self-identity, self-expression, community building, and emotional support.

The World Health Organization (WHO), in 2018, indicated that in Brazil, 5.8% of the population (equivalent to 11.5 million people) suffered from depression linked to mental illnesses and 9.3% (equivalent to 18.6 million people) from anxiety disorders, based on excessive media consumption, which is higher than the world average of 4.4% (322 million people) for depression and 3.6% from anxiety disorder (263 million people). In Latin America and specifically in Brazil, few studies have been done on the use of the Internet related to mental health problems (Vasconcelos et al., 2015).

This study was conducted during the COVID-19 crisis, gathering voluntary participation from December 19th, 2020, to February 2nd, 2021. It is important to note that this is commonly a period of holidays, travels, and social gatherings. However, the social isolation brought by the pandemic forced people to stay at home and turn more than ever to the Internet for social interaction. In this context in which the coronavirus pandemic boosted social media usage globally, besides from aiding in disseminating educational content and information about COVID-19, SNSs have become an important tool to bring people closer while they cannot meet physically.

All the aspects raised above bring concerns and motivations that can be summed up to the problem of this research, which is **What is the relationship between the use of Instagram and its diverse resources with the effects on mental health in the context of the COVID-19 pandemic?**

Given the relevance of this social problem, the main objective of this research is to understand the influence of Instagram on different generations in social interaction and, consequently, its relationship with the development of mental health effects, such as Social Anxiety, Self-Presentation, Loneliness, and Problematic Social Media Use. Specific objectives include identification of the primary mental health effects caused by Instagram, analysis of the

impact of various features for each mental health effect, identification of the behavior on Instagram by generation, and presenting a framework that relates behavioral and attitudinal variables to mental health effects.

This research contributes to the development of a psychometric analysis with four adapted effects on mental health evidenced in the literature. The following scales were used: for Social Anxiety the Social Anxiety Scale for Social Media Users (SAS-SMU) (Alkis et al., 2017), for Self-Presentation both the Positive Self-Presentation (PSP) and Honest Self-Presentation (HSP) (Kim & Lee, 2011), for Loneliness the UCLA Loneliness scale (version 3) (Russell, 1996) and for Problematic Social Media Use the Social Media Use Questionnaire (SMUQ) (Xanidis & Brignell, 2016).

## 2 THEORETICAL FRAMEWORK

This session is formed by the theories supporting the choices of variables for this study's construct, as well as its definitions and relevant data for the proposed framework. At first, we will talk about the concepts that provided the foundation for the construction of the theoretical model, subdivided into (2.1) Social anxiety, (2.2) Self-Presentation, (2.3) Loneliness, (2.4) Problematic Social Media Use, and (2.5) Mental Health on Instagram. Lastly, the list of resources and features of Instagram that were considered relevant for this study.

### 2.1 Social Anxiety

Anxiety is a construct that reflects affective characteristics and involves cognitive, behavioral, and physiological aspects. It is a common disorder defined by worrying thoughts, feelings of apprehension, tension, nervousness, and even physical changes such as sweating, increased blood pressure, trembling, and dizziness. Social anxiety is a type of anxiety resulting from fear or anxiousness from interacting with or being negatively evaluated by others. It has been defined as the enduring experience of discomfort, hostile ideation, and incompetence performance in the anticipation and conduct of an interpersonal transaction and a state resulting from the prospect or presence of interpersonal evaluation in real or imagined social settings (Alkis et al., 2017).

Socially anxious people need to reduce anxiety, thus motivating them to minimize their chances of making undesired impressions on others. Severe social anxiety leads to isolation and social withdrawal (Y.-K. Lee et al., 2014). However, it can also appear in subtle safety behaviors such as speaking quickly or over preparation. Inflated threat expectancies in social-evaluative circumstances and their corresponding avoidance prevent individuals from realizing that they are overestimating the likelihood of negative feedback and underestimating their own social ability (B. W. Lee & Stapinski, 2012).

Due to greater control over self-presentation, improved relationship quality, and decreased risk of negative evaluation (B. W. Lee & Stapinski, 2012), there is an overall perception that online communication provides safer means of interaction. Research does show that online interaction positively benefits anxious individuals, but also puts this group as likely to develop problematic or excessive Internet use behavior (Y.-K. Lee et al., 2014). In opposition, the pursuit of attention and self-validation via Instagram likes can be positive because it provides individuals with a tool to try on and gain feedback on new facets of their developing identities, especially adolescents and emerging adults (Dumas et al., 2017).

This study considers four dimensions of Social Anxiety relevant to social media use, as per research by Alkis et al. (2017): Shared Content Anxiety (SCA), Privacy Concern Anxiety (PCA), Interaction Anxiety (IA), and Self-Evaluation Anxiety (SEA). SCA derives from the sharing of content by individuals themselves or by others about them in social media platforms and how others will judge these. PCA includes certain potential privacy risks regarding personal information disclosed on SNS. Individuals with deep privacy concerns and who are socially anxious are more likely to avoid revealing and sharing personal information online. IA refers to the social anxiety derived from interacting and communicating with someone, especially those who newly met on social media platforms. Lastly, SEA considers the way a person evaluates and views him/herself because of what other people thought about him/her on social media platforms.

## **2.2 Self-Presentation**

Self-presentation refers to activities strategically designed to give certain impressions to other people. Concerned by how others perceive them, people manage their behavior to present favorable and appropriate images to others (Naeyele & Goffman, 1956). It is an essential motivation of behavior in offline and online scenarios, and the latter provides individuals with greater control over their self-presentational behavior. Virtually all people need to and can present themselves in a certain way, varying in this need's intensity (Kimmerle & Cress, 2008). Self-presentation theorists postulate that people are motivated to gain social approval in interpersonal encounters and engage in actions that might attract attention and engender recognition (Jackson, 2007). In addition, self-consciousness (public vs. private) plays a crucial role in regulating strategic self-presentation behaviors (Lee-Won et al., 2014).

Social networking sites (SNSs) provide technological features that allow their users to present themselves to others. Individuals can construct an online representation of themselves, and while most sites encourage users to show accurate representations of who they are, participants do this to varying degrees (Boyd & Ellison, 2007). Since self-presentational styles can be altered online, users can be whoever they want (Morahan-Martin & Schumacher, 2003). Freed from usual constraints, users can self-present with a more idealized self-image, maximizing acceptance.

As an SNS, Instagram enables users to communicate through their profiles, comments, and private messages, as well as showcase their personalities and lives with many other available features. Such communication modes, being asynchronous, editable, and non-



anonymous, allow people to engage in self-presentation selectively (Walther, 2007). In this way, self-presentation may take various forms and levels of authenticity or self-disclosure, depending on what aspects of the self are selected, highlighted, or edited.

Authenticity involves concepts of truth, being genuine, and realness (Beverland & Farrelly, 2010). In line with self-determination theory, it involves the individual's engagement in intrinsically motivated behaviors, such as those emanating from innate desires and passions. Market research recognizes this attribute's importance, with consumers increasingly desiring authenticity from their products and brands. Authenticity improves message receptivity and relationship quality, and social networking site users prefer realistic identity presentation as opposed to overly idealistic (Labrecque et al., 2011).

Wheless defines self-disclosure as any message about the self that an individual communicates to another. It is a construct that varies along dimensions such as honesty, amount, conscious intent, and positive or negative valence (Gibbs et al., 2006). It is a crucial component in developing personal relationships, being a type of communication through which individuals make themselves known to others. Research suggests that the limited cues in CMC (computer-mediated communication) likely result in over attribution and exaggerated or idealized perceptions of others (Walther, 2007). Therefore, the increased opportunities for self-presentation and identity manipulation results in self-disclosure online being less honest (Gibbs et al., 2006).

A known form of self-presentation is the protective self-presentation, which refers to the avoidance of social rejection. Those with social anxiety doubt their interpersonal competencies and capacities of creating favorable impressions, thus adopting a protective self-presentation style. The goal of this is not winning approval but avoiding others' disapproval. Research has examined this construct in conjunction with loneliness, which can occur when social anxiety or social interaction avoidance leads to having fewer social contacts than one desires (Jackson, 2007).

This study follows literature and uses two relevant self-presentation strategies relevant to Instagram: positive versus honest. Positive self-presentation (PSP) is a form of self-presentation in which individuals choose to showcase themselves in an exclusively positive manner. Heavy Facebook users have been found to perceive other people there as "happier and having better lives" (Lee-Won et al., 2014), and the same can be said about Instagram. On the other hand, users that anticipate long-term relationships with their online connections may

choose to present themselves more honestly, without selectively putting their best face forward (Kim & Lee, 2011).

### **2.3 Loneliness**

“Loneliness occurs when a person’s network of social relationships is smaller or less satisfying than the person desired,” otherwise stated as the involuntary state of social isolation or the feeling of being solitary (Cotten et al., 2013). It does not originate solely from objective contact levels but from the difference between the desire for social relationships and their actual availability. Although being lonely can be a transient state, it can also be considered a stable personality trait, i.e., a chronic state (Morahan-Martin & Schumacher, 2003).

Lonely people have difficulty making friends, participating in groups, and initiating social activities. They are less likely to be intimate and self-disclose, have poor social skills and lower self-esteem, and are more likely to be socially inhibited and anxious, sensitive to rejection, and self-conscious (Morahan-Martin & Schumacher, 2003). Researches have established that loneliness is related to serious health risks in children, adolescents, and adults, suggesting it can increase the risk of death by as much as 26% (Pittman & Reich, 2016).

Internet communication tends to facilitate self-disclosure and enhanced self-presentation, providing a place for practicing and developing social skills, expressing unexplored parts of oneself, and working through psychological issues. These factors help explain why engaging in social behavior online reduces loneliness levels (Shaw & Gant, 2002). Lonely individuals may also use the Internet as an escape: to reduce stress, lessen negative feelings of loneliness and look for emotional support. However, when individuals use the Internet for non-communicative purposes or use it in excessive amounts detrimental to their social roles, it impacts little on their loneliness or even causes it to increase (Cotten et al., 2013).

Empirical studies have produced mixed findings regarding a link between loneliness and social media use because of its capacity to either help or worsen the feeling. Individuals can utilize their online relationships and interactions in a way that makes them feel sufficiently connected or more socially isolated. In image-based platforms such as Instagram, the enhanced intimacy offered helps decrease loneliness compared to text-based platforms such as Twitter. Instagram users’ ability to like and comment contribute to the immediacy and intimacy required for simulated social presence, which leverages this SNS as an excellent option to help mitigate loneliness (Pittman & Reich, 2016).

An association has been made between loneliness and increased or compulsive Internet use. Even though our society devotes more technology to stay connected than any other in history, loneliness is higher than in any previous generation (Pittman & Reich, 2016). Lonely individuals can be drawn online for the potential of companionship, different social interaction patterns, and to modulate negative moods originated from loneliness (Morahan-Martin & Schumacher, 2003). However, two opposing hypotheses could explain loneliness and Internet use's relationship: either excessive Internet use causes loneliness, or lonely individuals are more likely to use it excessively. Relevant research shows how young adults with high social media use feel more socially isolated but warn about the need for future studies determining directionality and reasons for such associations (Primack et al., 2017).

## **2.4 Problematic Social Media Use**

A now integral part of daily life activities, Internet use has reached such an extent that individuals started demonstrating behavioral and psychological patterns seen in other addictions such as drugs, gambling, or alcohol. Studies demonstrated that relying on SNS to address loneliness and stress or maintain and establish new relationships significantly predicted symptoms of dependence (Xanidis & Brignell, 2016).

Inconsistency exists around the definition of problematic social media use (PSMU). However, Bányai et al. (2017) comprises PSMU as mood changes and preoccupation of using social media, including negative feelings and psychological symptoms when they are unavailable, and facing negative consequences in real life areas caused by excessive use. Diagnosis of internet-related disorders has not been established due to a lack of constancy in empirical studies and many synonym suggestions of diagnosis. The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) currently recognizes only one internet-related disorder – the Internet Gaming Disorder –, included in Section 3 of the DSM-5.

The most widely used definition is Davis' (2001), in which the acts of using the Internet to regulate unpleasant moods, perceiving more interpersonal control online than offline, and becoming attached to the benefits provided by the Internet lead to excessive use, compulsion development, withdrawal signs, and negative social, occupational and/or psychological consequences in the user's offline life. These factors are collectively thought to be symptomatic of PSMU.

This form of Internet addiction has no offline equivalent but causes similar symptoms as substance abuse deprivation does. When not connected to social media, individuals may feel

isolated and stressed, leading to increased anxiety and depression (Kırcaburun et al., 2019). PSMU can then be determined by addictions symptoms that include: salience (i.e., preoccupation with social media use), mood modification (i.e., excessive social media use causing specific changes in mood states), withdrawal symptoms (i.e., negative feelings such as irritability or anxiety when social media use is restricted), conflict (i.e., interpersonal problems resulted by social media usage), and relapse (i.e., returning to excessive use after a period of abstinence) (Bányai et al., 2017).

There is a positive correlation between depressive symptoms and social media use and a negative one between self-esteem and high social media use (Bányai et al., 2017). Several psychological vulnerabilities are associated with PSMU, including depression, loneliness, substance addictions, aggression, and shyness. Since these factors move individuals to isolate themselves in their offline lives, they seek to fulfill interpersonal needs online (B. W. Lee & Stapinski, 2012). Subsequently, problematic social media use is a consequence of pre-existing psychopathology.

## **2.5 Mental health on Instagram**

Mobile SNS provides its users with constant access to posts created by others and enables individuals also to assume the role of creator, sharing content with friends, acquaintances, and other online audiences. Like other SNS such as Facebook and Twitter, Instagram posts collect feedback as “likes” and comments (Fox & Vendemia, 2016). Despite requiring little investment of time or energy from the liker, these quick responses carry complex social meaning and serve as powerful self-assessment tools (Butkowski et al., 2019). Users receive direct reactions to their own social media posts and witness the ones received by others. In such interactions, likes and comments serve as quantified social acceptance measures and, when viewed as the most important, immerses users in searching for validation (Butkowski et al., 2019). Such intertwined users’ roles as both consumers and creators encourage social comparison and observational learning, influencing the content and its editing (Chae, 2017).

Excessive or indiscriminate use of the Internet, including social networks, can negatively affect personal relationships, in communication with the external environment, and to unsatisfactory professional performance. It is suggested that time spent engaging with SNSs displaces other more critical activities beneficial to mental health, such as sleep and face-to-face time with friends. Many studies report associations between increased time spent on SNSs and heightened levels of depression and anxiety (Coyne et al., 2020). Additionally, research has

shown that attitudes toward social media feedback received on selfies, an appearance-oriented self-representation, affect body image disturbance in young women (Butkowski et al., 2019)

Nonetheless, social media's popularity can also be a bright spot for mental health, with many positive aspects of virtual communication. Use of social media to strengthen pre-existing affective bonds is associated with decreased depression. Healthy use can also increase perceived social support and self-esteem, as well as decrease loneliness and depression (Shaw & Gant, 2002). Therefore, the benefits and detriments can be a matter of how social media is actually used. Table 1 presents the various features existing on Instagram, and Figure 2 exhibits the Conceptual Model that permeates this study.

Table 1: Features of Instagram

<b>Features</b>	<b>Description</b>
Photo and video visualization	Allows the user to view photos and videos (limited to 60 seconds) from their network or even from other users as long as the content is posted in public mode, in addition to being able to search for several photos using keywords (also known as hashtags).
Photo and video editing	Allows the user to post their own content after editing it. In their posts, users can tag others, add location, write descriptions, use hashtags, and more.
Comments and likes on posts	Allows the user to leave comments on other users' posts or even leave your impression regarding the post, through the reactions of likes. These are quantified and the numbers of comments and likes for each post can be seen by users.
Private messages	Communication via Instagram chat in which users can talk to each other via text messaging or audio, and share content privately.
Stories	Allows users to share photos, videos, texts, stickers, live broadcasts, location tagging, filters, and much more. Unlike posting directly on the feed, content shared via Stories disappear after 24 hours.
Search / Explore	Users can browse a feed of content from users that they do not currently follow but could be relevant to their tastes. Instagram gathers information from users to feed the algorithm that makes such features work.
Watch and post Stories	Unlike posting content directly to their feeds, Instagram users can post on Stories, where the content disappears after 24 hours. It also differs because creators can see a list of all users who watched something posted in their own Stories.
Reels	Allows users to create or watch 15-second videos with audio, effects, and other creative tools. It is a feature commonly compared to Tik Tok.
IGTV	Allows users to create or watch videos of a maximum of 60 minutes.
Livestreaming	Allows users to create or watch recorded or live video transmissions.
Shop	Allows brands to create a virtual storefront where users can explore and buy products without leaving Instagram.
Fun filters (Stories)	Refers to augmented reality (AR) filters more commonly used on Stories, adding computer-generated effects as layers over the real-life image displayed by the camera. Some examples are filters that give the person animal ears or turns the person into a famous character, filters that change the background, that imitate memes, etc.
Cosmetic filters (Stories)	Refers to AR filters more commonly used on Stories, adding computer-generated effects as layers over the real-life image displayed by the camera. These types of filters enhance the person's appearance by beautifying them. Examples are makeup filters and filters that give the person fuller lips, lighter eye-color, change nose shapes, etc.
Simple filters (Stories)	Refers to filters that do not necessarily use AR, since they only modify the overall photography aspect. Examples are filters that change saturation, add light leaks, simulate old cameras, add borders or stickers, etc.

Source: the author

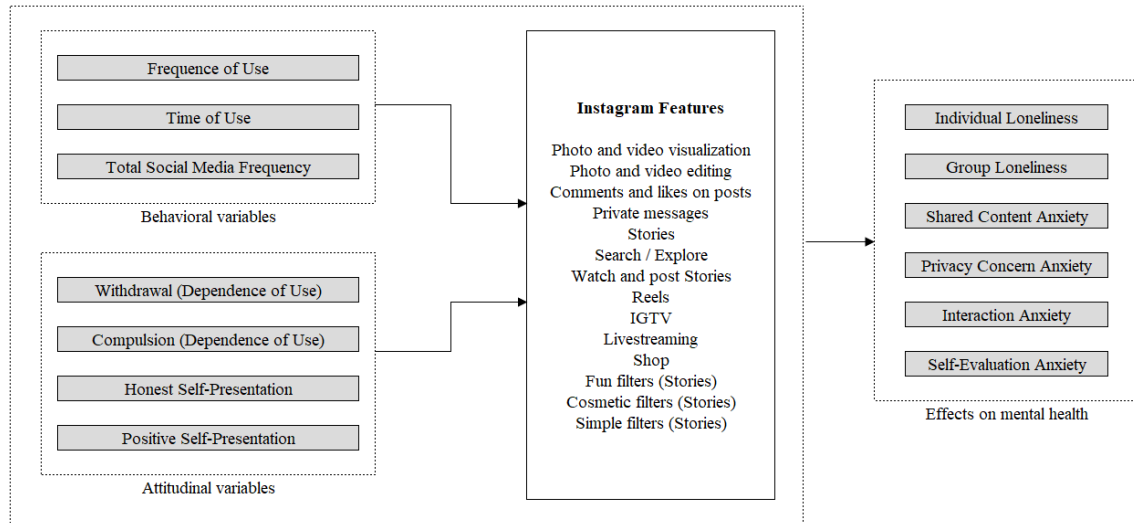


Figure 2: Variables  
Source: the author

### 3 METHOD

Regarding the empirical phase of this study we conducted the application of a survey, in which the data collection instrument was composed of descriptive questions and assertions. The Likert scale used end points anchored at 1 and 5 for all statements. Descriptive questions were used to collect the respondents' characteristics, such as age, sex, and income. All scales were adapted for the context of this study.

#### 3.1 Scales used

The **Social Anxiety Scale for Social Media Users (SAS-SMU)** is a four-factor structured construct created by Alkis, Kadirhan, and Sat (2017) to measure social anxiety in social media platforms specifically. Studies that used the SAS-SMU have shown that higher social media addiction levels are associated with higher levels of anxiety and burnout (Liu & Ma, 2020). Moreover, negative assumptions about the world significantly predict higher levels of interaction anxiety and self-evaluation anxiety (Pitcho-Prelorentzos et al., 2020).

The **Social Media Use Questionnaire (SMUQ)** was developed to measure addiction behavior patterns and dependence, including levels of Withdrawal and Compulsion, of SNS (social network sites) use. Xanidis and Brignell (2016) indicated a correlation between increased dependence on SNS and decreased sleep quality, and increased everyday cognitive failures. It has since become an important tool to assess problematic and excessive use of social media.

The **UCLA Loneliness Scale (Version 3)** was developed by psychologist Daniel Russell in 1996 to assess how often an individual feels disconnected from others. Studies have shown that people with higher loneliness scores have worse romantic and friendship relationships (Russell et al., 1984) and that having the right balance of sleep, work and time with family and friends is connected to being less lonely (Cigna, 2018). The scale has been used before on research about SNS use, showing a significant positive correlation between Facebook addiction and the extent of experience of loneliness (Shettar et al., 2017).

The **Positive Self-Presentation (PSP)** and the **Honest Self-Presentation (HSP)** scales were developed by Kim and Lee (2011) to assess the extent to which Facebook users selectively show positive (PSP) or honest (HSP) aspects of themselves through Facebook. Independent contributions play an essential role in SNSs that offer self-presentation opportunities, so users can engage in various self-disclosure levels and have different self-presentation strategies. The original study demonstrated a direct effect of positive self-presentation on subjective well-being

and a possible enhancement of happiness rooted in social support by honest self-presentation. The scales have been used extensively on research about social media's impacts on life satisfaction, perceived social support, depression, well-being, envy, and others.

### **3.2 Data collection and sample procedures**

For the adaptation of the research instrument and the selected scales to the Brazilian context, we used a reverse translation process. Before applying the questionnaire, the instrument was sent to 4 judges for validation. After review for comprehension, clarity of the items, and relevance, a pre-test was performed with 27 individuals. After applying the test, 872 questionnaires were obtained (see Appendix B) using SurveyLab's platform. To prepare the database, outliers were identified and removed using the Mahalanobis Distance  $D^2$  (Hair et al., 2010). This step resulted in removing 115 questionnaires, leaving a total of 757 observations in the sample. We carried out data collection by online means and the criterion for selecting the research subject was concerning the use of Instagram, with non-users being discarded. Consequently, the sample can be classified as non-probabilistic for convenience and by judgment, for the exploratory function in opinion research about Instagram use (Malhotra, 2014).

### **3.3 Data analysis procedures**

Due to the characteristics of the study, descriptive analyzes and three multivariate phases were conducted: a) Exploratory Factor Analysis - to identify the components of each of the groups of the scales under study (Social Anxiety, Self-Presentation, Loneliness and Problematic Social Media Use); b) Multiple Regression - to identify the independent variables that, in this case, were the functionalities of Instagram in relation to the dependent variable (Social Anxiety, Self-Presentation, Loneliness and Problematic Social Media Use), measured by the average of the components of the scale; and c) Analysis of the difference in means between groups to identify the relationship between disorders that influence the dependent variables. These include approximate frequency of using Instagram, approximate length of time using Instagram, the importance given to the metrics (number of likes, comments, views, etc.), consumer behavior, among others.



## 4 DATA ANALYSIS

This section deals with the presentation and analysis of participants' profile, analysis of difference in the group means (T-Test and ANOVA), exploratory factor analysis and regression.

### 4.1 Profile of respondents

This section presents the survey respondents' profile to characterize the sample, comprised of 757 people, all Instagram users, considering valid responses. As described in Table 2, there are 520 females (68.7%) and 237 males (31.3%). If we observe the relationship between sex and age, millennials stand out in both sexes, composed of 30.8% (n=105) male and 69.2% (n=236) female respondents. Both groups reported a similar frequency of SNS and Instagram use, with 32.7% (n=170) females and 35% (n=83) males using SNSs for over 4 hours per day and with 28.1% (n=146) of females and 28.7% (n=68) males using Instagram for over 2 hours per day. There was homogeneity between females and males regarding the motivation of Instagram use.

Table 2: Demographic profile

Sex		Generation		Income	
Female	520 (68.7%)	Generation Z	199 (26.3%)	Less than R\$ 2,090.00	256 (33.8%)
Gender	237 (31.3%)	Millenials	341 (45%)	R\$ 2,090.01 to R\$ 4,180.00	233 (30.8%)
		Generation X	162 (21.4%)	R\$ 4,180.01 to R\$ 10,450.00	196 (25.9%)
		Boomers	5 (7.3%)	R\$ 10,450.01 to R\$ 20,900.00	52 (6.9%)
				R\$ 20,900.01 or more	20 (2.6%)

This study considers the chronological endpoints set by Pew Research Center, an American nonpartisan that conducts public opinion polling, media content analysis, demographic research, and other empirical social science research. Using their data, Generation Z respondents are aged 7 to 22, millennials 23 to 38, generation X 39 to 54, and boomers 55 to 73. By this division, the respondent distribution is 26.3% (n=199) generation Z, 45% (n=341) millennials, 21.4% (n=162) generation X and 7.3 (n=55) boomers. Income distribution showed that 64.6% (n=489) earn up to R\$ 4,180.00 per month, with 59.2% (n=202) of millennials in the same range. Another 25.9% (n=196) of total respondents earn between R\$ 4,180.01 and R\$ 10,450.00, with 29.6% (n=101) millennials in the same range.

Millennials and generation X showed a higher daily frequency of use ( $n=163/66.3\%$ ) than other generations, with over 2 hours usage. Boomers use it less frequently, with an average between half an hour and an hour per day ( $n=22/40\%$ ). Most respondents older than 23 years old have been users for 5 to 8 years ( $n=264/34.9\%$ ). While 53.3% ( $n=106$ ) of generation Z, 63.9% ( $n=218$ ) of millennials and 57.4% ( $n=93$ ) of generation X consider Instagram to be their main social media network, only 40% ( $n=22$ ) of boomers agree.

Due to the timing and context of this study and for comparison purposes, participants were asked to classify their frequency of use in a 1-5 Likert scale during three distinct periods: before the pandemic, during early pandemic (e.g., first few months, when there was still a “feeling of newness”) and now (after almost a year of its start). Results showed that all generations increased their frequencies of use (figure 3). While Generation X ( $\bar{x}_{\text{before}}=2.77$ ;  $\bar{x}_{\text{early}}=3.40$ ;  $\bar{x}_{\text{now}}=3.96$ ) and Boomers ( $\bar{x}_{\text{before}}=2.75$ ;  $\bar{x}_{\text{early}}=3.13$ ;  $\bar{x}_{\text{now}}=3.98$ ) had a more exponential increase of use as the periods progressed, Generation Z ( $\bar{x}_{\text{before}}=2.55$ ;  $\bar{x}_{\text{early}}=3.40$ ;  $\bar{x}_{\text{now}}=3.55$ ) and Millennials ( $\bar{x}_{\text{before}}=2.94$ ;  $\bar{x}_{\text{early}}=3.60$ ;  $\bar{x}_{\text{now}}=3.76$ ) stabilized theirs during the last two periods. Such behavior can be explained by the fact that early generations already had intensive use before the pandemic, while the two oldest got into SNSs more suddenly to stay connected during the social isolation period.

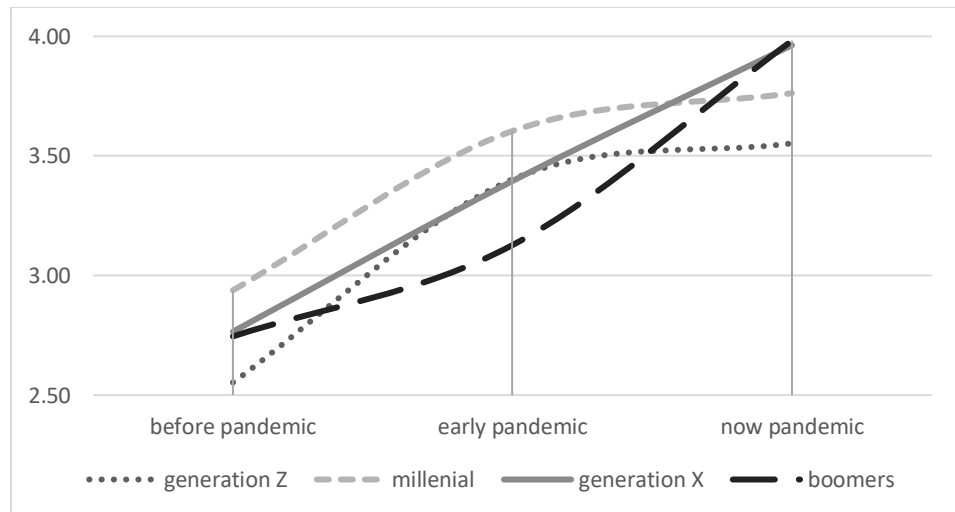


Figure 3: Comparison of frequency of use during three pandemic periods

Participants were also asked about other SNSs used concurrently with Instagram (figure 4), with results including Facebook (37.3%), Twitter (16.7%), LinkedIn (16.2%), Pinterest (15%), Tik Tok (10.9%), Snapchat (3.2%), none (0.7%) and an open question for other options. Not all services mentioned can be described as social media networks, but the most cited

services or tools include WhatsApp, Reddit, Telegram, Messenger, Tumblr, Letterboxd, and others.

Facebook use is more prevalent amongst generation X (n=143/88.3%) and boomers (n=52/94.5%); Twitter (n=135/39.6%) and LinkedIn (n=137/40.2%) amongst millennials, and Tik Tok (n=51/25.6%) and Pinterest (n=86/43.2%) amongst generation Z. Youtube use was also high in all generations but excluded from the analysis since the platform does not require mandatory registration, thus tending to engage its users as passive recipients of media forms and contents.

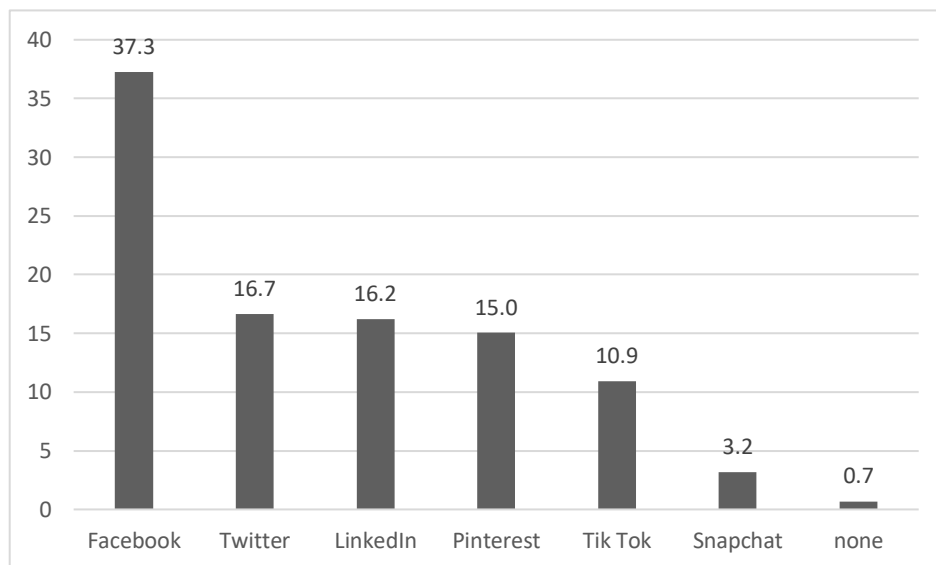


Figure 4: Concurrent use of other social media with Instagram

#### 4.2 Exploratory Factor Analysis (EFA)

In this phase, the variables that comprise the scales selected for this study were confirmed. Each of the scales underwent an EFA with its respective variables. The interest was primarily centered on the common factors, which are interpreted in relation to the observed variables (Hair et al., 2010).

The first analysis of the scales – Shared Content Anxiety, Privacy Concern Anxiety, Interaction Anxiety, Self-Evaluation Anxiety, Positive Self-Presentation, Honest Self-Presentation, Individual Loneliness, Group Loneliness, Withdrawal, and Compulsion – occurred through their respective commonality matrices. For this analysis, we used the Kaiser-Meyer-Olkin (KMO) criterion and the Bartlett Sphericity Test. The KMO test assesses whether there are enough significant correlations between the items to justify the factorial analysis, constituting a global measure that indicates the strength of the relationship between items through partial correlations that represent the correlations between each pair of items, after

removing the linear effect from all other items. The sample adequacy measure (KMO) must be greater than 0.70, being considered inadequate for the sample whose KMO results in a number less than 0.60. Bartlett's sphericity test checks the null hypothesis that the correlation matrix is an identity matrix, that is, that there exists no relationship between the observed variables. The higher the Bartlett test values, the greater the probability that the correlation matrix is not an identity matrix, leading to the rejection of the null hypothesis (Levin et al., 2013).

KMO values were verified, presenting a satisfactory result for all scales. In Bartlett's sphericity test, the result was significant for all scales, with  $p < .001$ . After these procedures, the cross-factor loading was observed, and some variables were excluded in the Positive Self-Presentation (PSP4), Honest Self-Presentation (HSP1), Loneliness (LON1 and LON8), and Social Media Use (SMUQ3 and SMUQ5) scales (see Appendix A).

Communality is the proportion of the variance of an observed variable that is explained by the extracted factors. Their estimates range from 0 to 1. A high value indicates that the factors extracted explain a high proportion of the variance of a given variable observed. Zero communality implies that no portion of the variance is explained by the extracted factors (Levin et al., 2013).

Subsequently, unidimensionality (score  $> .50$  in the factor) and low cross-load (score  $< .40$  in the other factors) (Levin et al., 2013) were observed. All variables had adjustments due to commonality ( $h^2 < .5$ ) and weak coefficients ( $< .4$ ). In the end, the loads were adjusted to one factor, for each of the observed scales, with adequate values for explaining the total sample variance, as well as the reliability, confirmed with Cronbach's Alpha (table 3).

Table 3: Results obtained in the Exploratory Factor Analysis (EFA)

Effects on mental health	Scales	Scale Items	KMO	Sphericity test	Explanation of the total sample variance	$\alpha$
Social Anxiety	SCA	7	.933	$p < .001$	72.21%	.935
	PCA	5	.796	$p < .001$	63.51%	.855
	IA	6	.890	$p < .001$	73.98%	.929
	SEA	3	.745	$p < .001$	83.61%	.902
Presentation	PSP	5	.781	$p < .001$	61.26%	.840
	HSP	3	.730	$p < .001$	76.40%	.845
Loneliness	Indiv. LON	4	.749	$p < .001$	66.16%	.826
	Group LON	8	.925	$p < .001$	67.69%	.931
Problematic Social Media Use	Withdrawal	3	.730	$p < .001$	76.85%	.848
	Compulsion	4	.825	$p < .001$	70.66%	.861

EFA resulted in the extraction of only one component for each of the psychological factors, which received the same names of origin, to facilitate the other analyzes of this research (Social Anxiety, Self-Presentation, Loneliness and Problematic Social Media Use). Measurement variables for the following analysis were constructed based on the respective averages of each component: Shared Content Anxiety ( $\bar{x}$  = SCA1, SCA2, SCA3, SCA4, SCA5, SCA6, SCA7), Privacy Concern Anxiety ( $\bar{x}$  = PCA1, PCA2, PCA3, PCA4, PCA5), Interaction Anxiety ( $\bar{x}$  = IA1, IA2, IA3, IA4, IA5, IA6), Self-Evaluation Anxiety ( $\bar{x}$  = SEA1, SEA2, SEA3), Positive Self-Presentation ( $\bar{x}$  = PSP1, PSP2, PSP3, PSP5, PSP6), Honest Self-Presentation ( $\bar{x}$  = HSP2, HSP3, HSP4), Group Loneliness ( $\bar{x}$  = LON5, LON6, LON9, LON10), Individual Loneliness ( $\bar{x}$  = LON2, LON3, LON4, LON7, LON11, LON12, LON13, LON14), Withdrawal ( $\bar{x}$  = SMUQ1, SMUQ2, SMUQ6) and Compulsion ( $\bar{x}$  = SMUQ4, SMUQ7, SMUQ8, SMUQ9).

### 4.3 Multiple regression

In this phase of the analysis, the dependent variable was characterized by the aggregate score of the items of the scales of measurement of effects on mental health (Shared Content Anxiety, Privacy Concern Anxiety, Interaction Anxiety, Self-Evaluation Anxiety, Positive Self-Presentation, Honest Self-Presentation, Individual Loneliness, Group Loneliness, Withdrawal, and Compulsion), obtained in the phase of the EFA. The independent variables encompassed the attributes related to the 20 explanatory variables that indicate the main features of Instagram. The explanatory variables are observed in the scientific literature that focuses on psychological disorders; therefore, these independent variables were analyzed as a group, receiving the name of functionalities. For data analysis, the author utilized statistical software IBM SPSS Statistics v. 25.

The regression is closely related to the correlation since the interest is still in the strength of association between two variables. In regression, however, there is still concern about specifying the nature of this relationship. One variable is established as dependent, and the other, independent. That is, one variable is believed to influence the other. In regression analysis, a mathematical equation is used to predict the value of the dependent variable (indicated by  $Y$ ) based on the independent variable (indicated by  $X$ ):

$$Y = a + bX + e$$

The term  $a$ , called  $Y$  intercept or constant, refers to the expected level of  $Y$  when  $X = 0$ . This is the value of the basic plot because it is what  $Y$  should be before we take into account the

level of  $X$ . The term  $b$  is called the slope (slope or regression coefficient) for  $X$ . This represents the value of the variation of  $Y$  (increase or decrease) for each variation of an  $X$  unit (Levin et al., 2013).

The multicollinearity test was previously performed, which refers to the existence of more than one exact linear relationship, which means the existence of a “perfect” linear relationship between some (or all) explanatory variables of a regression model. Hair et al. (2010) considers that VIFs (variance inflation factor) below 5 can be considered. The analysis of this indicator resulted in VIFs below the critical limit established in the literature. Table 4 displays the regression indicators of the analyzed data and table 5 its results.

Table 4: Indicators for each feature

Item	Mean	Standard deviation	K-S	p value	VIF
feat1	6.02	1.37	.39	<.001	1.436
feat2	3.75	1.96	.141	<.001	2.842
feat3	2.61	1.99	.252	<.001	2.743
feat4	3.32	1.83	.152	<.001	1.820
feat5	5.17	1.81	.179	<.001	1.511
feat6	2.54	1.88	.265	<.001	1.814
feat7	4.51	1.87	.136	<.001	1.330
feat8	5.49	1.74	.235	<.001	1.650
feat9	3.96	2.07	.12	<.001	2.127
feat10	3.48	2.06	.16	<.001	1.718
feat11	1.63	1.40	.438	<.001	2.583
feat12	2.93	1.87	.188	<.001	1.859
feat13	1.53	1.26	.453	<.001	2.477
feat14	4.27	1.93	.128	<.001	1.403
feat15	2.20	1.69	.319	<.001	1.756
feat16	1.27	.91	.53	<.001	2.074
feat17	1.99	1.55	.359	<.001	1.514
feat18	3.23	2.11	.18	<.001	1.935
feat19	2.88	2.12	.243	<.001	2.083
feat20	3.36	2.23	0.189	<.001	2.024

The explanatory variables are presented, as well as their respective descriptions, expected relationships, and outputs of multiple regressions by groupings for effects on mental health (SCA, PCA, IA, SEA, Positive Self-Presentation, Honest Self-Presentation, Individual Loneliness, Group Loneliness, Withdrawal, and Compulsion).

**Table 5: Linear regression results for Social Anxiety**

Variable	Short Feature Description	SCA			PCA			IA			SEA			Incidence
		B	Beta	Sig.	B	Beta	Sig.	B	Beta	Sig.	B	Beta	Sig.	
Contant		1.537		.000	2.512		.000	2.227		.000	1.897		.000	
feat1	Watch photos and videos	.016	.020	.625	.032	.039	.354	.056	.067	.102	.060	.064	.115	0
feat2	Edit and post own photos	.059	.103	.072	.022	.039	.516	.017	.030	.607	.043	.066	.250	0
feat3	Edit and post own videos	-.082	-.145	.010	-.041	-.074	.206	-.064	-.111	.051	-.071	-.110	.050	2
feat4	Comment	-.012	-.019	.676	-.015	-.025	.596	-.080	-.129	.006	-.066	-.093	.041	2
feat5	Likes	.015	.024	.565	.043	.070	.107	.025	.040	.340	.038	.053	.201	0
feat6	Hashtags	-.056	-.093	.042	-.054	-.092	.055	-.040	-.066	.155	-.078	-.114	.012	2
feat7	Search / Explore	-.001	-.001	.978	.029	.050	.226	.004	.007	.855	-.010	-.015	.708	0
feat8	Watch Stories	.110	.169	.000	.045	.071	.118	.065	.099	.026	.113	.154	.000	3
feat9	Post Stories	-.070	-.129	.010	-.069	-.130	.012	-.082	-.148	.003	-.066	-.106	.033	4
feat10	Watch Reels	.018	.032	.468	.010	.019	.690	.025	.045	.312	.046	.074	.097	0
feat11	Edit and post Reels	.037	.046	.404	-.028	-.035	.536	-.083	-.102	.064	-.021	-.023	.675	0
feat12	Watch IGTV	-.005	-.008	.857	-.007	-.012	.807	-.006	-.010	.830	-.033	-.048	.299	0
feat13	Edit and post on IGTV	-.070	-.079	.142	-.024	-.028	.616	.005	.006	.914	-.047	-.046	.385	0
feat14	Private messaging	-.003	-.005	.910	-.001	-.002	.969	-.033	-.056	.171	-.006	-.009	.825	0
feat15	Watch Livestreaming	-.016	-.024	.591	.018	.027	.567	.036	.053	.243	-.003	-.004	.920	0
feat16	Livestream	-.021	-.017	.727	.002	.002	.971	-.017	-.013	.788	-.068	-.048	.328	0
feat17	Shop	.069	.095	.023	.023	.032	.460	.074	.101	.017	.102	.123	.003	3
feat18	Fun filters (Stories)	.045	.083	.078	.062	.120	.015	.014	.026	.590	.073	.120	.011	2
feat19	Cosmetic filters (Stories)	.101	.190	.000	.042	.081	.116	.068	.127	.011	.064	.106	.030	3
feat20	Simple filters (Stories)	.019	.037	.446	.008	.017	.744	.052	.102	.037	.021	.036	.453	1
		R <sup>2</sup> = .149			R <sup>2</sup> = .075			R <sup>2</sup> = .133			R <sup>2</sup> = .156			
		R <sup>2</sup> adjusted = .126			R <sup>2</sup> adjusted = .050			R <sup>2</sup> adjusted = .110			R <sup>2</sup> adjusted = .133			

#### 4.3.1 Linear regression results for Social Anxiety

For SCA, the Kolmogorov-Smirnov (KS) test resulted in a value of  $p < .001$ , indicating a non-normal distribution, which for Hair et al. (2010) is common for studies in applied social sciences. The ANOVA test, with an  $F_{(20,736)} = 6.461$  and a significance of  $p < .001$ , means that the model studied in all variables is quite significant. The equation of the regression line of these data is:

$$SCA = 1.537 + .010feat3 + .042feat6 + .000feat8 + .010feat9 + .023feat17 + .000feat19$$

For PCA, KS resulted in a value of  $p < .001$ , also indicating a non-normal distribution. The ANOVA test, with an  $F_{(20,736)} = 2.986$ ;  $p < .001$ , means that the model studied in all variables is quite significant. The equation of the regression line of these data is:

$$PCA = 2.512 + .012feat9 + .015feat18$$

For IA, the KS resulted in  $p < .001$ , indicating a non-normal distribution. The ANOVA test, with an  $F_{(20,736)}$  statistic = 5.659;  $p < .001$ , means that the model studied in all variables is quite significant. The equation of the regression line of these data is:

$$IA = 2.227 + .006feat4 + .0026feat8 + .003feat9 + .017feat17 + .011feat19 + .037feat20$$

Lastly, for SEA, KS also resulted in  $p < .001$ . The ANOVA test, with an  $F_{(20,736)} = 6.785$ ;  $p < .001$ , means that the model studied in all variables is quite significant. The equation of the regression line of these data is:

$$SEA = 1.897 + .050feat3 + .041feat4 + .012feat6 + .000feat8 + .033feat9 + .003feat17 + .011feat18 + .030feat19$$



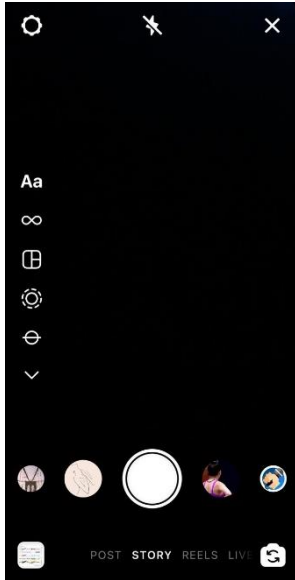


Figure 5: Post photo/video in Stories

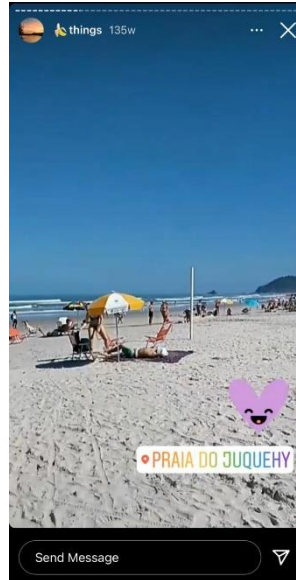


Figure 6: Watch others' Stories

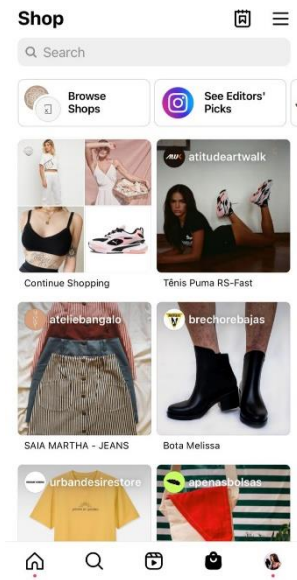


Figure 7: Navigate in the Shop section

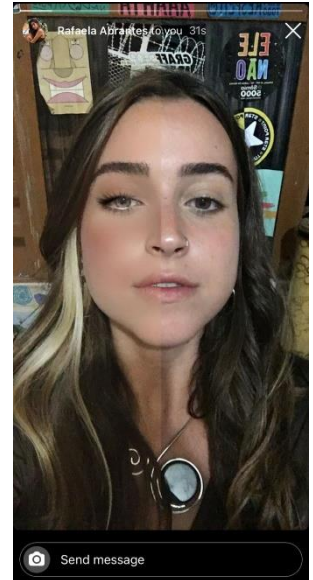


Figure 8: Cosmetic filters

In this study, it was observed that Social Anxiety occurs when individuals have excessive threat expectancies in social-evaluative situations, which motivates social evasion or the creation of a self-presentation strategy that minimizes negative impressions. These behaviors can be observed in the use of Instagram features with elevated incidence amongst the four types of Social Anxiety considered in this investigation.

The highest incidence was posting photos or videos in the Stories section (figure 5), a feature that, similarly with the use of cosmetic filters (figure 8), involves interaction and the possibility of negative evaluation, which can lead to increased Social Anxiety. Other more passive uses, such as watching others' Stories (figure 6) can be linked to social comparison factors, connecting with the desire to have the same experience to fit in socially. Since individuals are motivated to make a good impression on other people, they are constantly comparing and competing with other individuals in the search for social approval (High & Caplan, 2009). With the social distancing experience, watching others' activities can cause stress and feelings of missing out on being with friends, shopping, and many others.

This study considered three types of filters commonly used on Instagram Stories, as explained in Table 1. Though there is plenty of software designed specifically for image editing and enhancement, Instagram has made such transformation a more straightforward process by allowing users to apply augmented reality (AR) filters that modify their appearance. Cosmetic filters are almost exclusively used on photos with faces. Selfies (i.e., self-portraits taken by the user) are the most popular type of picture on Instagram and 38% more likely to receive "likes" and 32% more likely to receive a comment (Pittman & Reich, 2016).

The high incidence of use of cosmetic filters in the analysis of Social Anxiety is linked to the fact that making a photo more appealing might increase the likelihood of receiving validation and attention from others. Such like-seeking behavior has similar motivations as trying to minimize negative evaluation from others, a core factor of Social Anxiety. Thus, the use of cosmetic filters will naturally be higher amongst those who are more socially anxious. Likewise, browsing others' enhanced photos on Instagram may trigger assumptions that these images indicate how the people in them actually live or look like (Lup et al., 2015), which can trigger feelings of social comparison and negative self-evaluation, leading to Social Anxiety.

#### 4.3.2 Linear regression results for Self-Presentation

For PSP, the Kolmogorov-Smirnov (KS) test resulted in a value of  $p < .001$ , indicating a non-normal distribution. With an  $F_{(20,736)} = 3.133$  and a significance of  $p < .001$ , the ANOVA test means that the model studied in all variables is quite significant. The equation of the regression line of these data is:

$$PSP = 2.120 + .002feat2 + .021feat6 + .015feat8 + .034feat9 + .021feat19$$

For HSP, KS resulted in  $p < .001$ , also indicating a non-normal distribution. The ANOVA test, with an  $F_{(20,736)} = 3.357$ ;  $p < .001$ , means that the model studied in all variables is quite significant. The equation of the regression line of these data is:

$$HSP = 2.328 + .000feat9 + .007feat18 + .022feat19$$



Figure 9: Example of cosmetic filter than can be used on Stories



Figure 10: Example of cosmetic filter than can be used on Stories

Self-presentation strategies vary in the use of Instagram. Many argue that the platform's image-driven nature encourages more Positive Self-Presentation since users polish their lives' characterizations. Cosmetic filters (see figures 9 and 10) do just that, beautifying one's image so they can present a better-illustrated version of themselves. Consequently, posting on Instagram Stories and using this type of filter presented high incidence in this scale's analysis. It is particularly worrying since exposure to SNSs that emphasize appearance is linked to increased body image disturbance (Lup et al., 2015), and cosmetic filters can aggravate it.

#### 4.3.3 Linear regression results for Loneliness

For Group Loneliness, the KS resulted in a value of  $p < .001$ , also indicating a non-normal distribution. The ANOVA test, with an  $F_{(20,736)}$  statistic = 6.425;  $p < .001$ , means that the model studied in all variables is quite significant. The equation of the regression line of these data is:

$$\text{Group Loneliness} = 2.347 + .001\text{feat4} + .000\text{feat9} + .019\text{feat14} + .042\text{feat19} + .004\text{feat20}$$

As for Individual Loneliness, KS resulted in a value of  $p < .001$ , also indicating a non-normal distribution. The ANOVA test, with an  $F_{(20,736)} = 5.102$ ;  $p < .001$ , means that the model studied in all variables is quite significant. The equation of the regression line of these data is:

$$\text{Indiv. Loneliness} = 2.201 + .024\text{feat4} + .007\text{feat9} + .037\text{feat19} + .000\text{feat20}$$



Figure 11: Example of a post's comment section



Figure 12: Example of "simple" filters that can be used on Stories

Features that presented high incidence on the Loneliness scale for this study include commenting (figure 11), posting Stories, cosmetic filters, and simple filters (figure 12). This can be due to the fact that individuals with higher loneliness scores tend to create and consume more Instagram content. Furthermore, some lonely individuals might also engage in like-seeking behaviors to feel more connected to others and increase their visibility/popularity among peers (Dumas et al., 2017).

#### 4.3.4 Linear regression results for PSMU

For Withdrawal, the Kolmogorov-Smirnov (KS) test resulted in a value of  $p < .001$ , indicating a non-normal distribution. The ANOVA test, with an  $F_{(20,736)} = 8.006$  and a significance of  $p < .001$ , means that the model studied in all variables is quite significant. The equation of the regression line of these data is:

$$Withdrawal = .368 + .044feat6 + .008feat8 + .000feat16 + .048feat17$$

For Compulsion, KS resulted in a value of  $p < .001$ , also indicating a non-normal distribution. The ANOVA test, with an  $F_{(20,736)} = 10.941$ ;  $p < .001$ , means that the model studied in all variables is quite significant. The equation of the regression line of these data is:

$$Compulsion = .441 + .006feat1 + .006feat3 + .012feat8 + .000feat10 + .040feat14 + .000feat17$$

Watching Stories and browsing the Shop section on Instagram showed high incidence when analyzed together with Problematic Social Media Use, both for Compulsion and Withdrawal. These types of activities can be characterized as a more passive use of the platform. While active use involves chatting, sharing content, or giving likes, passive use refers to browsing, scrolling, reposting, or looking at content posted by others. The latter seems to be particularly detrimental, triggering resentment, envy, and loneliness (Lup et al., 2015).

#### 4.4. Mean analysis – Mental health effects by generation

All mental health effects variables showed a difference between the generations, except for PSP and Withdrawal, which indicates that all generations have similar levels of Positive Self-Presentation ( $\bar{x} = 2.99$ ) and Withdrawal ( $\bar{x} = 1.65$ ).

Generation Z and Millennials scored significantly higher on the SCA ( $\bar{x} = 2.67$ ), PCA ( $\bar{x} = 3.28$ ), IA ( $\bar{x} = 2.98$ ), SEA ( $\bar{x} = 3.20$ ), Individual Loneliness ( $\bar{x} = 2.92$ ), and Compulsion ( $\bar{x} = 2.75$ ) scales. The youngest generation presented the lowest Honest Self-Presentation ( $\bar{x} = 2.49$ ) and Group Loneliness ( $\bar{x} = 2.91$ ) levels, in opposition with Generation X for HSP

( $\bar{x}$ =3.02) and Boomers on Group Loneliness ( $\bar{x}$ =3.76). Millennials are more inclined towards Positive Self-Presentation ( $\bar{x}$ =3.13) than other groups. Boomers showed the lowest levels of Compulsion ( $\bar{x}$ =1.81). Such results shed important light on how different mental health effects affect each generation differently and to different levels.

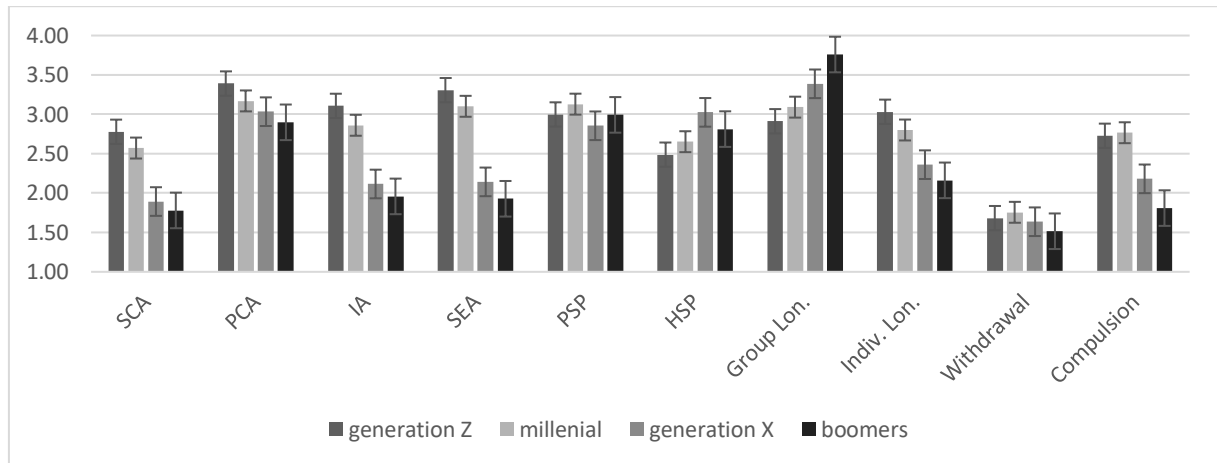


Figure 13: Mean distribution for high and low mental health effects by generation

#### 4.5 Mean analysis - Shop feature

For the highest possible significance for both Social Anxiety (incidence=4) and PSMU (incidence=2) scales present in the regressions section before, we will discuss the shop feature further.

Instagram introduced the Shop feature in May of 2020, amidst the COVID-19 crisis, as a way for businesses to keep going and to provide users with a native shopping experience inside the platform. It allows users to visit shops and browse products, explore collections, and purchase products. In November 2020, following the feature's success, Instagram moved the section's icon to its home screen for easier access and more exposure. Furthermore, the feature now allows personalized recommendations, editor's picks curated by Instagram's own shop channel, shoppable videos, new product collections, and more.

Brand content is transmitted in SNSs faster and to a much larger audience than traditional media. As such, digital marketers are increasingly incorporating social media as an indispensable part of their online brand strategy. It is estimated that over 96% of businesses use SNSs to market their brand and products, and Instagram users have the highest brand community engagement and commitment compared to other SNSs (Phua et al., 2017).

Table 6: Items about consumer behavior on Instagram

Item	Assertives	Mean	Standard deviation	K-S	p value	VIF
shop1	Do you use Instagram to research products you want to buy?	.61	.49	.399	<.001	1.362
shop2	Do you usually buy products after seeing them on Instagram?	.49	.50	.345	<.001	1.633
shop3	Do you follow your favorite brands and stores on Instagram?	.70	.46	.446	<.001	1.118
shop4	Have you bought something after seeing an Instagram ad?	.65	.48	.420	<.001	1.395
shop5	Have you bought something after seeing an ad created by an “influencer”?	.31	.46	.440	<.001	1.212
shop6	Do Instagram ads bother you?	.51	.50	.347	<.001	1.024

The items about consumption behavior (table 6) were measured in binary responses by assigning a dummy variable for data manipulation, in which yes=1 and no=0.

On using Instagram to research products they want to buy, 61.3% of respondents answered positively. The Independent T-Test showed (figure 14) that those with high SCA ( $t_{(755)}=4.182$   $p<.001$ ), SEA ( $t_{(755)}=3.094$ ;  $p=.002$ ), Withdrawal ( $t_{(755)}=5.546$ ;  $p<.001$ ) and Compulsion ( $t_{(755)}=6.237$ ;  $p<.001$ ) are more prone to using Instagram for this purpose, superiorly to their low counterparts. Those with low and high PCA and IA presented no statistical difference in this analysis.

Several functionalities of the Shop feature can explain this connection. Those with high SCA and SEA might prefer to shop online to diminish interaction with others but also be affected by the possibility of being negatively evaluated by their purchasing decisions. While high Problematic Social Media Use, be it Compulsion or Withdrawal, indicate a predisposition to use the platform and its features more, including the Shop section.

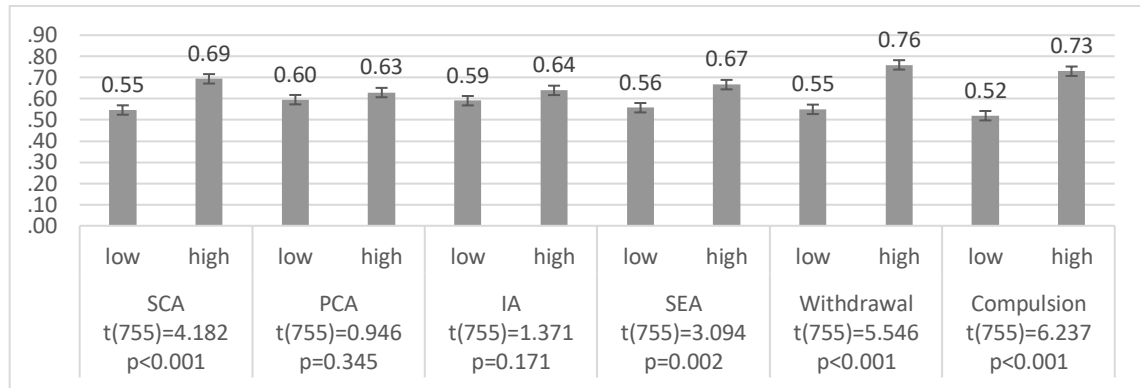


Figure 14: Analysis of “shop1” for low and high effects on mental health

About half of respondents (50.72%) claimed they do not usually buy products after seeing them on Instagram. When analyzing the average (figure 15), it was discovered that the groups of high SCA ( $t_{(755)}=4.507$ ;  $p<.001$ ), SEA ( $t_{(755)}=3.930$ ;  $p=.002$ ), Withdrawal ( $t_{(755)}=6.098$ ;  $p<.001$ ) and Compulsion ( $t_{(755)}=7.160$ ;  $p<.001$ ) usually buy more after seeing the product on Instagram, superiorly to their low counterparts. Both low and high PCA and AI groups did not show a relevant difference in means.

Highly socially anxious individuals might engage in shopping behavior to increase social approval by showing off new products acquired or stating financial status; or to decrease the possibility of an adverse judgment for not having a particular product. PSMU also plays a role in making individuals with high dependence levels more prone to using the feature to browse or shop.

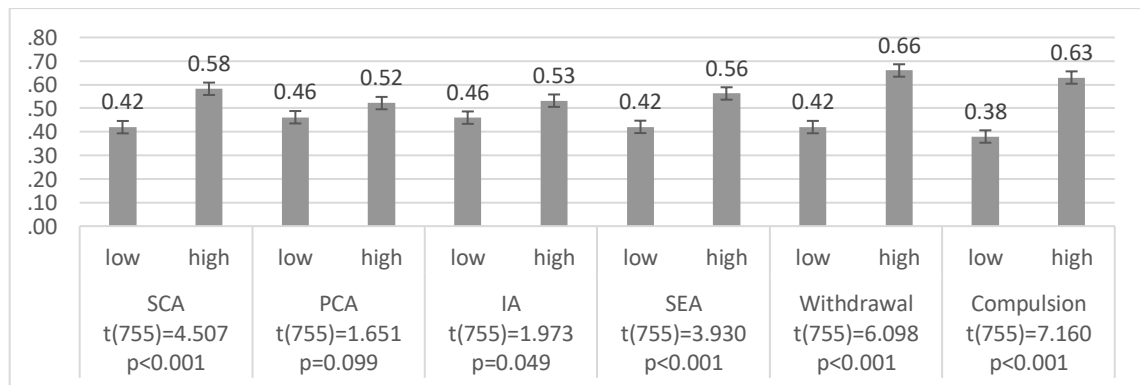


Figure 15: Analysis of “shop2” for low and high effects on mental health

Most respondents, 70.4%, reported following their favorite brands on Instagram. The intergroup analysis (figure 16) of Withdrawal ( $t_{(755)}=3.946$ ;  $p<.001$ ) and Compulsion ( $t_{(755)}=2.668$ ;  $p=.008$ ) presented significant differences for this activity, meaning that individuals with high levels of Withdrawal and Compulsion are the most avid followers of their favorite brands and stores. High PSMU also indicates higher use of overall features, which

would probably not be different for this question. Such information provides valuable insight to companies developing and maintaining a social media strategy.

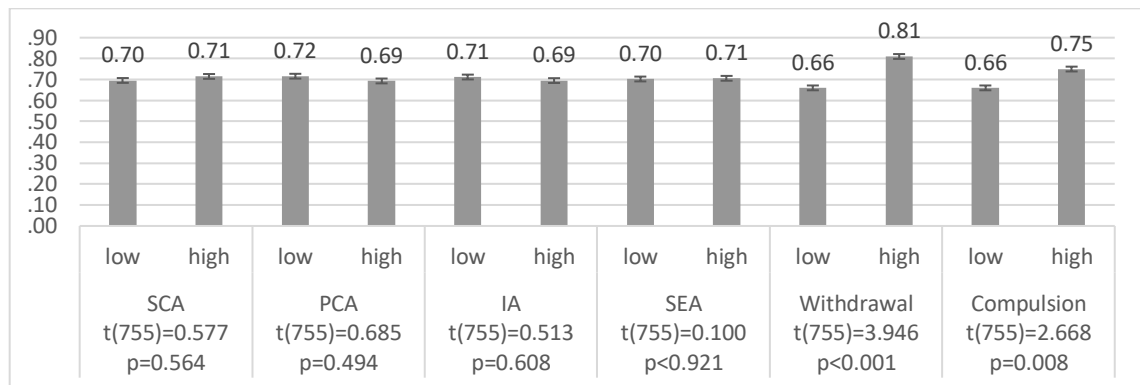


Figure 16: Analysis of “shop3” for low and high effects on mental health

Most respondents (65.25%) also replied yes to having bought a product after seeing it advertised on Instagram. The independent T-test showed (figure 17) that respondents from the high SCA groups ( $t_{(755)}=2,326$ ;  $p=.020$ ), Withdrawal ( $t_{(755)}=3,292$ ;  $p<.001$ ) and Compulsion ( $t_{(755)}=4,524$ ;  $p<.001$ ) have a greater tendency to buy something after seeing an ad on the platform. Both low and high PCA and AI groups did not show a significant difference in means. A predisposition or impulsivity to shop can be linked to feelings of wanting to belong and not being negatively perceived by peers, common for socially anxious individuals.

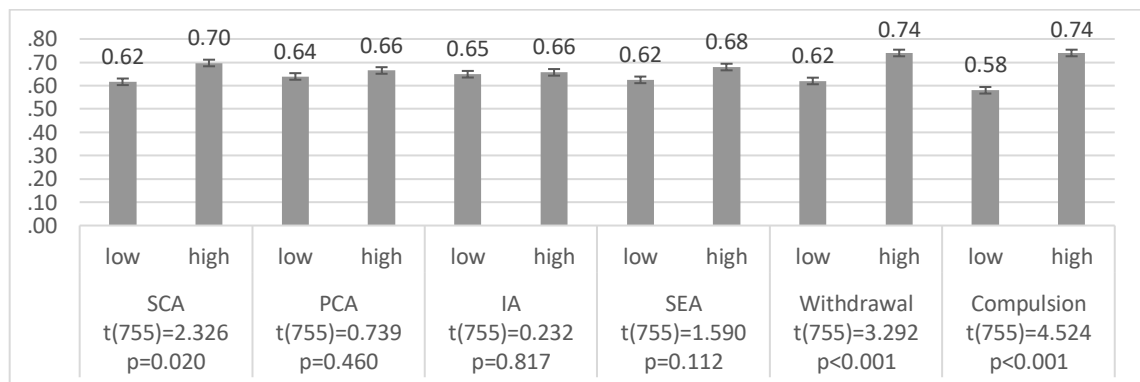


Figure 17: Analysis of “shop4” for low and high effects on mental health

A majority of respondents (69.22%) say they have never bought a product after seeing an ad done by an “influencer”. Social media influencers (SMIs) represent a new type of third-party endorser who shapes others’ opinions through social media. Brands are increasingly approaching SMIs to promote products and complement traditional branding communication (Audrezet et al., 2020).



All analyzed scales showed differences between the means (figure 18), except for PCA ( $t_{(755)}=1.521$ ;  $p=.129$ ). For both high and low PCA groups, privacy and data sharing issues do not influence purchasing behavior after advertising done by SMIs. Since the one under exposure is the influencer in this type of content, the user watching the advertisement is not particularly affected by others' judgment no matter how high or low his Social Anxiety might be.

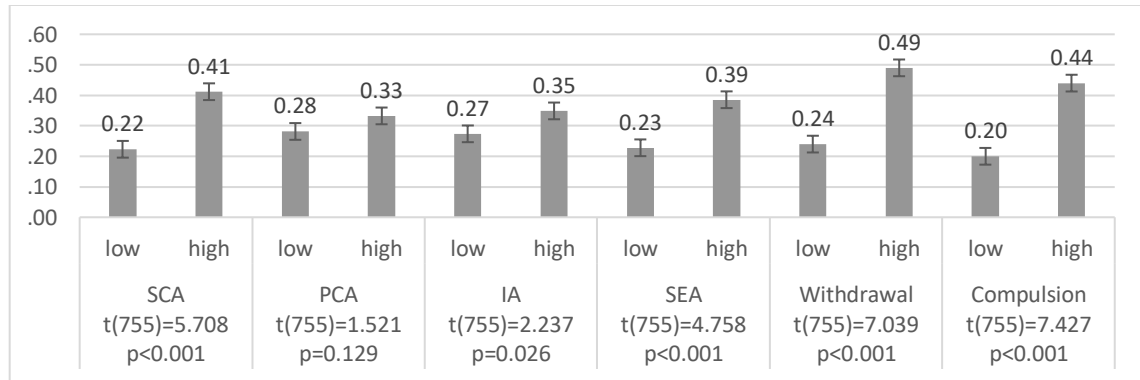


Figure 18: Analysis of “shop5” for low and high effects on mental health

The last question on this theme showed mixed opinions, with 51.12% of users reporting being bothered by Instagram ads. This analysis comes in opposition to the one before, given that only PCA ( $t_{(755)}=2.791$   $p=.005$ ) showed a distinction between groups on the independent T-test (figure 19). Users are more than concerned with how social media handles their data, developing or increasing levels of Privacy Concern Anxiety as Instagram frequently updates its algorithm to make the platform more profitable for advertisers. Since its acquisition by Facebook, the company has gathered a considerable amount of information on individuals to make ads more appealing. There are still few studies on how beneficial or detrimental these interactions can be in the era of big data. It is still undefined if it will usher in a new wave of privacy incursions and invasive marketing. For now, this study can already attest to the correlation between PCA and the unlikeness of ads on Instagram.

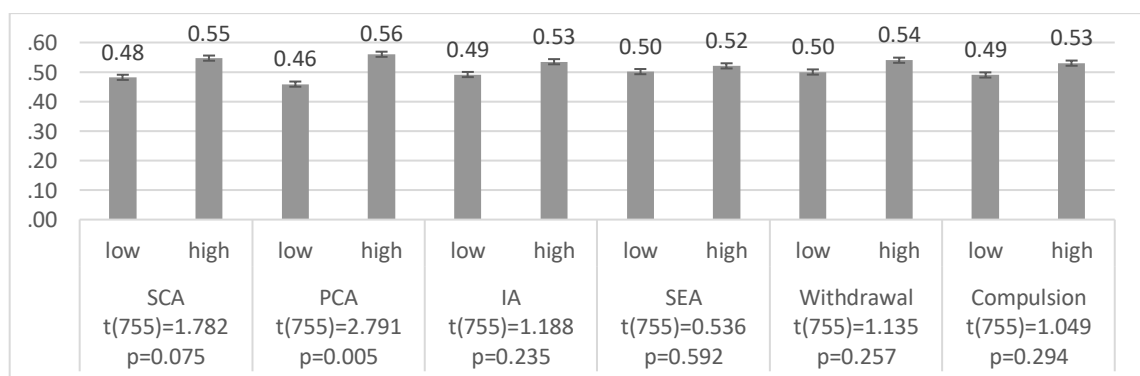


Figure 19: Analysis of “shop6” for low and high effects on mental health

## 5 CONCLUSIONS

In this section, the conclusions and final considerations will be presented, dealing with the practical and theoretical implications, suggestions for future research and the limitations encountered.

### 5.1 Research Implications

This work aimed to identify the influence of Instagram on different generations in social interaction and, consequently, its relationship with the development of mental health effects, such as Social Anxiety, Self-Presentation, Loneliness, and Problematic Social Media Use). It was possible to identify the components of each of the scales under study, analyze the relationship of Instagram functionalities in relation to each effect on mental health, and identify the relationship between factors described in the literature that influence them. The objective was successfully achieved since significant variables were discovered, and relevant information on Instagram use during the COVID-19 pandemic was presented, thus validating the research framework and possible replication it in future studies.

One of the contributions of this study is bringing psychometric scales developed in other areas of study (i.e., Psychology) to bring a level of greater complexity in the interpretative process. Instagram can be understood through various functionality representations due to having an interface representing abstract values related to interactions and points of interest that need some interpretation element. This interpretation's importance is in the search for understanding the purpose of these functions in terms of communication with and about the social world (Schwartz & Mahnke, 2018).

There are certain peculiarities in the case of individuals who manifest mental health effects resulting from Instagram. Individuals with social anxiety, increased loneliness, and problematic social media use can get worse, since these issues affect their daily lives and relationships because of the high frequency of use and extended periods using Instagram. Furthermore, the comparisons they make between their lives and those of other users, and the consequent dependence on the social network, can aggravate the situation. In individuals with social anxiety, Instagram can be a kind of refuge, a safe and comfortable place, far from the judgments and insecurities generated by physical human contact. For lonely individuals, it can provide a place to interact socially and feel closer to others.

In this study, it was found that women use Instagram as much as men, with similar feature adoption, and the highest concentration for both is in the frequency range over two hours

a day. A 28.3% of total respondents have been users for more than 8 years, which demonstrates the platform's permanence in users' lives.

## **5.2 Practical Implications**

Firstly, this study benefits users of social media, particularly Instagram. Reflecting on how we use the tools and the time available to us, and how it affects our mental health and overall well-being is crucial. Since one's social and psychological circumstances influence media use and effects, being aware of its circumstances provides knowledge to make better decisions and adapt use for a healthier outcome.

Key findings in this study can also benefit Facebook, owner of the Instagram platform, who can better understand its users and further optimize its services and features to diminish adverse mental health effects. By knowing the motivation and the extent of users' experience, Instagram can become a more helpful and cheerful social media.

Other brands and companies with online strategies can take advantage of demographic and usage information provided in this study, as well as learn from consumer behavior exposed by the analysis of the many shopping activities available on Instagram. They can engage with their customers who are social media users to provide support, valuable content, and a better online environment for all.

Finally, this study serves academic purposes and can significantly benefit future endeavors, considering the rarity of individual-focused research in Business studies. It is up to the other institutions to use works such as these to achieve the objectives and show that the academy can actively contribute to market and individual issues.

## **5.3 Limitations and recommendations for future studies**

Based on the previous considerations, the importance of conducting research to assess how Instagram use affects different aspects of mental health. It is worth mentioning that due to the global pandemic conditions (COVID-19) during the research (December/2020 to February/2021), the sample collected was obtained via social networks and communication applications (i.e., Whatsapp, Telegram, Facebook and Instagram), which may, a priori, create a bias in collecting respondents who are more familiar with technology.

Despite achieving a representative sample for this study, with a total of 872 respondents, the online questionnaire was viewed 3529 times, which gives a response rate of 25%. Future

research on this theme should create strategies for higher response rates and respondent retention.

It is also understood that the transversal character of the collection method used limits the research, since this approach is based on the analysis of a single moment. Thus, we suggest that future longitudinal tests could advance new discoveries in the field.

Despite efforts for a broad sample, it was a surprise that in this particular study women were over-represented (68.7%). This can be due to a higher number of female Instagram users or by a higher willingness of females to participate in such studies. This hypothesis can be tested in future research.

Also, due to the restricted sample and mostly obtained for convenience and by judgment, the external validity (Malhotra, 2014), which is the extent to which the results of a study can be generalized, is compromised. Future research could seek to obtain a more representative sample, thus generating results with greater possibility of generalization, so that it is possible to compare different realities between countries.

## 6 BUDGET

Specification	Description	Total spent
SurveyLab	3-month subscription of survey tool	60.90 USD – 330.55 BRL
Instagram ads	Instagram ads to advertise the questionnaire	78.49 USD – 426 BRL
Grammarly	1-year subscription to writing/grammar app	85.00 USD – 461.32 BRL

### 6.1 OTHER RESOURCES

Tools and resources previously owned by the author.

Specification	Description
SPSS v.25	Statistical software
Zotero	Reference manager software
GlobalProtect	For accessing databases (Web of Science)

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## APPENDIX

**Appendix A: Scales, constructs, items, assertives, factor loading, h<sup>2</sup> and references**

Scale	Constructs/Factors	Item	Assertives	Factor loading	h <sup>2</sup>	References
Social Anxiety Scale for Social Media Users (SAS-SMU)	Shared Content Anxiety	SCA1	On social media... I feel anxious about the fact that others might find my actions awkward.	.817	.668	Alkis et al. (2017)
		SCA2	... I am concerned about being ridiculed by others for the content I have shared.	.849	.720	
		SCA3	... I am concerned about the fact that the content I share will not be liked by others.	.839	.703	
		SCA4	... I am afraid that my close friends will not approve of my behavior.	.860	.740	
		SCA5	... I would feel uncomfortable when my friends publicly express their dislike about content I have shared.	.819	.671	
		SCA6	... I am concerned about disapproval of my behaviors by others.	.872	.760	
		SCA7	... I am concerned about being judged about my shared content by my friends in the presence of others.	.890	.792	
	Social Anxiety	PCA1	... the possibility of having my private information acquired by others makes me feel anxious.	.864	.746	
		PCA2	... the possibility of having my private information shared publicly makes me anxious.	.883	.779	
		PCA3	... I feel uneasy when my friends share my private information with people I do not know.	.800	.640	
		PCA4	... I would be concerned if my personal space is accessed without my consent.	.712	.507	
		PCA5	... I feel anxious about how social media companies/executives handle privacy policy regarding my private life.	.710	.504	
	Interaction Anxiety	IA1	... I feel anxious when talking with people I have just met.	.861	.741	
		IA2	... I feel nervous when I talk with people I do not know very well.	.891	.794	
		IA3	... I feel uneasy while making new friends.	.887	.787	
		IA4	... I feel tense when I meet someone for the first time.	.865	.747	
		IA5	... I am afraid of interacting with others.	.847	.717	

	Self-Evaluation Anxiety	IA6	... I feel nervous when I have to talk with others about myself.	.808	.653	Kim and Lee, (2011)
		SEA1	... I feel anxious about making a negative impression on people.	.914	.835	
		SEA2	... I am concerned about people thinking poorly of me.	.930	.865	
		SEA3	...I feel anxious about not being able to meet people's expectations.	.899	.808	
Positive Self-Presentation (PSP)	Positive Self-Presentation	PSP1	I post photos that only show the happy side of me.	.810	.655	
		PSP2	I selectively post photos in which I am having fun.	.793	.628	
		PSP3	I only write messages that portray me as happy regardless of my actual feelings.	.772	.596	
		PSP4*	I use smiling emoticons (i.e., smiley: ☺) a lot in the messages I write regardless of my actual feelings.	-	-	
		PSP5	I avoid writing about negative things that happen to me when I update my status.	.723	.522	
		PSP6	When I update my status, I only reveal positive feelings.	.813	.661	
Honest Self-Presentation (HSP)	Honest Self-Presentation	HSP1*	I post photos that show the true side of me.	-	-	
		HSP2	I don't mind writing about bad things that happen to me when I update my status.	.880	.774	
		HSP3	I freely reveal negative emotions I feel (for example, sadness, anxiety, or anger).	.874	.764	
		HSP4	I don't mind posting photos in which I do not look happy.	.868	.754	
UCLA Loneliness scale (version 3)	Loneliness	LON2	How often do you feel that you lack companionship?	.783	.613	Russell (1996)
		LON3	How often do you feel that there is no one you can turn to?	.859	.738	
		LON4	How often do you feel alone?	.868	.753	
		LON7	How often do you feel that you are no longer close to anyone?	.810	.656	
		LON11	How often do you feel left out?	.837	.701	
		LON12	How often do you feel that your relationships with others are not meaningful?	.781	.610	
		LON13	How often do you feel that no one really knows you well?	.744	.554	
		LON14	How often do you feel isolated from others?	.889	.791	
		LON5	How often do you feel part of a group of friends?	.806	.649	
		LON6	How often do you feel that you have a lot in common with the people around you?	.797	.635	
	Group Loneliness	LON9	How often do you feel outgoing and friendly?	.767	.589	


Social Media Use Questionnai re (SMUQ)	Dependence of Use		LON10	How often do you feel close to people?	.879	.773	Xanidis and Brignell (2016)
			LON1*	How often do you feel that you are “in tune” with the people around you?	-	-	
			LON8*	How often do you feel that your interests and ideas are not shared by those around you?	-	-	
		SMUQazul		I struggle to stay in places, where I won’t be able to access social network sites.	.882	.778	
		Withdrawal	SMUQ2	I feel angry, when I am not able to access my social network account	.883	.780	
			SMUQ6	I feel anxious, when I am not able to check my social network account	.865	.747	
		SMUQrosa	SMUQ4	I lose track of time, when using social network sites	.828	.686	
			SMUQ7	I stay online longer than initially intended.	.864	.747	
		Compulsion	SMUQ8	I spend a large proportion of my day using social network sites.	.853	.727	
			SMUQ9	I feel guilty about the time that I spend on social network sites	.817	.667	
			SMUQ3*	My relatives and friends complain that I spend too much time using social network sites.	-	-	
			S MUQ5*	I use social network sites, when I am in the company of friends	-	-	

Note: \*items removed in the Exploratory Factor Analysis phase by the extraction method - analysis of the main component.

Source: research data

## Appendix B: Online Questionnaire

Figure B-1



Pesquisa: Instagram e Saúde Mental  
**Apresentação**

Você está sendo convidado(a) a participar do estudo "Filtrando a vida real: O efeito do uso do Instagram na saúde mental", referente ao Trabalho de Conclusão de Curso a ser apresentado à Universidade Federal de São Paulo, pela aluna Gabriele Abrantes de Almeida, do curso de graduação em Administração. O objetivo desta pesquisa é analisar o impacto causado pelo uso pessoal do Instagram e seus efeitos positivos e negativos na saúde mental.

- **Participação Voluntária:** A participação é voluntária e você pode abandonar a pesquisa a qualquer momento, sem qualquer tipo de penalidade.
- **Confidencialidade:** Toda informação pessoal obtida será estritamente anônima, utilizada apenas para fins acadêmicos e de forma consolidada em relação a todos os respondentes.
- **Risco:** Não deve haver riscos ou desconfortos ao participante, além do tempo despendido para responder as perguntas.
- **Benefícios:** Não há benefícios especiais para você como resultado deste estudo, exceto que pode se tornar mais consciente de seu próprio comportamento em relação às suas respostas.
- **Procedimento:** Se você decidir participar deste projeto, vamos pedir que responda algumas perguntas sobre ele. É importante que manifeste de fato sua percepção em relação ao tema em suas respostas. A pesquisa levará cerca de 10 minutos para ser concluída.

**Recomendações:**

- ▶ Caso você também utilize o Instagram para o trabalho, considere apenas seu uso pessoal durante o preenchimento.
- ▶ Se estiver utilizando um celular, é ideal colocar o layout na horizontal para melhor visualização das perguntas com escalas.
- ▶ Se você precisar retornar à página anterior durante o preenchimento, utilize as setas localizadas no inferior da página atual.
- ▶ Para novidades sobre o sorteio e seu resultado, siga @agabsalmeida no Instagram!

Nos últimos anos, as redes sociais têm sido duramente criticadas, com muitas pessoas advogando pela diminuição do tempo de uso, pela atenção ao compartilhar informações pessoais e sobre os efeitos na saúde mental. Durante o isolamento social causado pela pandemia do coronavírus, a maioria das pessoas aumentou seu tempo online e com isso, o papel das redes sociais evoluiu e se diversificou - com a busca por notícias, diversão, distração... e uma forma de diminuir a solidão. É possível dizer que, na quarentena, a pressão para retratar uma imagem perfeita de nós na internet diminuiu e muitos estão vendo benefícios positivos nisso. Este formulário, mais que objeto de pesquisa, convida a todos que são usuários do Instagram a refletirem sobre si mesmos e como utilizam a plataforma.

Figure B-2

1. Há aproximadamente quanto tempo você utiliza o Instagram? \*

- ☐ Menos de um ano.
- ☐ De um a dois anos.
- ☐ De dois a cinco anos.
- ☐ De cinco a oito anos.
- ☐ De oito a dez anos.

2. Quanto tempo por dia, aproximadamente, você passa nas redes sociais? \*

Considerando apenas uso pessoal de aplicativos e websites como Facebook, Whatsapp, Instagram, Youtube, Telegram, Messenger, Tik Tok, LinkedIn, etc.

- ☐ Menos de uma hora por dia.
- ☐ De uma a duas horas por dia.
- ☐ De duas a três horas por dia.
- ☐ De três a quatro horas por dia.
- ☐ Mais de quatro horas por dia.

3. Com que frequência você faz uso do Instagram? \*

Considerar apenas uso pessoal.

- ☐ Menos de 30 minutos por dia.
- ☐ De 30 minutos a 1 hora por dia.
- ☐ De 1 hora a 1h30 por dia.
- ☐ De 1h30 a 2 horas por dia.
- ☐ Mais de 2 horas por dia.

Figure B-3

4. Compare sua frequência de uso do Instagram nos períodos abaixo. \*

Considere que 1 indica menor uso e 5 maior uso.

	1	2	3	4	5
Antes da pandemia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
No início da pandemia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Atualmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. Motivação de Uso \*

Quanto você diria que cada um destes motivos influencia seu uso pessoal do Instagram?

Na escala, considere que 1. Não influencia e 5. Influencia completamente.

	1	2	3	4	5
Interação social (interagir e socializar com os outros)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Busca de informações	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Passar o tempo (ocupar o tempo e aliviar o tédio)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Entretenimento (diversão, humor)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Relaxar (se distrair, aliviar stress)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comunicação (expressar opiniões, ter conteúdo para discutir)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conveniência (utilidade, facilidade de acesso)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Figure B-4

6. Em quais momentos você verifica o Instagram? \*

- ☐ Logo ao acordar
- ☐ Antes de dormir
- ☐ Quando está em aulas ou trabalhando/estagiando
- ☐ Durante as refeições
- ☐ Em encontros com amigos e/ou família
- ☐ Em momentos não específicos durante o dia
- ☐ Durante a madrugada
- ☐ Outros

7. Quais destas redes sociais você utiliza, além do Instagram? \*

Esta questão admite múltiplas respostas.

- |                                    |                                  |                                   |
|------------------------------------|----------------------------------|-----------------------------------|
| <input type="checkbox"/> Facebook  | <input type="checkbox"/> Tik Tok | <input type="checkbox"/> Youtube  |
| <input type="checkbox"/> LinkedIn  | <input type="checkbox"/> Twitter | <input type="checkbox"/> Snapchat |
| <input type="checkbox"/> Pinterest | <input type="checkbox"/> Nenhuma | <input type="checkbox"/> Outras   |

## Figure B-5

8. Você considera o Instagram sua principal rede social? \*

- ☐ Sim  
☐ Não

9. Quais conteúdos você acompanha no Instagram? \*

Esta questão admite múltiplas respostas.

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Dia a dia dos meus amigos e familiares | <input type="checkbox"/> Notícias         | <input type="checkbox"/> Informações sobre a Covid-19 |
| <input type="checkbox"/> Movimentos sociais                     | <input type="checkbox"/> Humor            | <input type="checkbox"/> TV e Famosos                 |
| <input type="checkbox"/> Esportes                               | <input type="checkbox"/> Política         | <input type="checkbox"/> Moda & Estilo                |
| <input type="checkbox"/> Música                                 | <input type="checkbox"/> Casa e Decoração | <input type="checkbox"/> Bem-Estar e Saúde            |
| <input type="checkbox"/> Gastronomia                            | <input type="checkbox"/> Outros           |   |

10. Para as ações abaixo relacionadas a celebridades e "influencers" no Instagram, responda de acordo com seu uso e comportamento: \*

Os "digital influencers" são profissionais das redes sociais que impactam centenas e até milhares de seguidores, retratando seu estilo de vida, opiniões e hábitos. Através da produção de conteúdo, são a aposta de muitas empresas para ações publicitárias e engajamento de marca.

	Sim	Não
Você se considera um influencer?	<input type="radio"/>	<input type="radio"/>
Você segue influencers?	<input type="radio"/>	<input type="radio"/>
Você compara sua vida com a de influencers?	<input type="radio"/>	<input type="radio"/>
Você compara sua aparência com a de influencers?	<input type="radio"/>	<input type="radio"/>
Seus amigos e familiares seguem influencers?	<input type="radio"/>	<input type="radio"/>
Você acredita que os influencers retratam suas vidas de forma verdadeira no Instagram?	<input type="radio"/>	<input type="radio"/>
Você confia mais num produto que é divulgado por influencer(s)?	<input type="radio"/>	<input type="radio"/>

## Figure B-6

11. Para as ações abaixo relacionadas a consumo no Instagram, responda de acordo com seu comportamento: \*

	Sim	Não
Você utiliza o Instagram para pesquisar objetos que você deseja comprar?	<input type="radio"/>	<input type="radio"/>
Você costuma comprar objetos após vê-los no Instagram?	<input type="radio"/>	<input type="radio"/>
Você segue os perfis das suas lojas e marcas favoritas?	<input type="radio"/>	<input type="radio"/>
Você já comprou algo após ver um anúncio no Instagram?	<input type="radio"/>	<input type="radio"/>
Você já comprou algo após ver uma publicidade feita por um(a) "influencer"?	<input type="radio"/>	<input type="radio"/>
Você se incomoda com os anúncios no Instagram?	<input type="radio"/>	<input type="radio"/>

12. Sua conta no Instagram atualmente está como: \*

Se precisar checar, basta ir em Configurações → Privacidade → Privacidade da conta.

- ☐ Pública  
☐ Privada

**Figure B-7**

13. Quanto você utiliza cada um destes recursos do Instagram? \*

Considere que 1 indica menor uso e 7 maior uso.

	1	2	3	4	5	6	7	
Visualizar fotos e vídeos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Editar e postar suas fotos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Editar e postar seus vídeos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Fazer comentários	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Curtidas (likes)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Hashtags	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Pesquisar / Explorar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Ver Stories	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Postar Stories	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Assistir Reels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Produzir e postar Reels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Assistir IGTV	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Produzir e postar no IGTV	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Enviar/receber mensagens privadas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Assistir Livestreaming	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Fazer Livestreaming	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Shop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Filtros engraçados ou divertidos (Stories)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Apenas para entretenimento (ex. filtro do cachorro, "qual personagem eu sou?", etc.)
Filtros estéticos (Stories)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Que alteram os traços do rosto e/ou aplicam maquiagem, "melhoram a aparência"
Filtros simples (Stories)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Alteram apenas coloração ou adicionam detalhes à imagem (ex. efeito Polaroid, bordas floridas, etc.)

**Figure B-8**

14. No Instagram, o quanto é importante pra você... \*

	Não é importante	Pouco importante	Moderado	Importante	Muito importante
... a quantidade de curtidas nas suas publicações?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... a quantidade de seguidores no seu perfil?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... a quantidade de comentários nas suas publicações?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... a quantidade de visualizações nos seus stories?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... a quantidade de respostas aos seus stories?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... que seus amigos e familiares curtam e comentem nas suas publicações?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



## Figure B-9

Considerando como você se sente, se expressa e se comporta, selecione seu grau de concordância com cada uma das afirmativas abaixo.

### 15. Comparação Social \*

Na escala, considere que 1. **Discordo totalmente** e 5. **Concordo totalmente**.

#### No Instagram...

	1	2	3	4	5
Eu frequentemente comparo como pessoas queridas (namorado(a), familiares, etc.) fazem as coisas com como outras pessoas as fazem.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu sempre presto muita atenção em como eu faço as coisas, comparando como os outros as fazem.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Se eu quero saber quão bem eu fiz algo, eu comparo o que fiz com o que os outros fizeram.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu frequentemente comparo como me saio socialmente (ex. habilidades sociais, popularidade) com outras pessoas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu não sou o tipo de pessoa que frequentemente se compara com as outras.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu frequentemente me comparo com os outros a respeito do que eu já conquistei na vida.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu frequentemente gosto de conversar com os demais sobre opiniões e experiências mútuas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu frequentemente tento descobrir como pessoas que enfrentam problemas similares aos meus pensam.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu sempre gosto de saber o que outras pessoas fariam em situações parecidas à minha.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Se eu quero aprender mais sobre algo, tento descobrir o que outros pensam a respeito.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu nunca considero minha situação de vida em relação à das outras pessoas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu acredito que o Instagram motiva as pessoas a se compararem.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Figure B-10

### 16. Dependência de Uso \*

Na escala, considere que 1. **Discordo totalmente** e 5. **Concordo totalmente**.

	1	2	3	4	5
Tenho dificuldade de permanecer em lugares nos quais não conseguirei acessar o Instagram.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu sinto raiva quando não posso acessar minha conta no Instagram.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Minha família e amigos reclamam que passo muito tempo no Instagram.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu perco a noção do tempo quando uso o Instagram.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu uso o Instagram quando estou na companhia de amigos.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu me sinto ansioso(a) quando não posso checar meu Instagram.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu permaneço online no Instagram por mais tempo do que pretendia inicialmente.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu passo uma grande parte do meu dia usando Instagram.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu sinto culpa pela quantidade de tempo que passo no Instagram.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A primeira coisa que faço no dia é acessar o Instagram.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Figure B-11

17. Consciência \*

Na escala, considere que 1. **Discordo totalmente** e 5. **Concordo totalmente**.

	1	2	3	4	5
Estou sempre tentando entender a mim mesmo.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Refliro muito sobre mim.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu sou frequentemente o objeto de minhas próprias fantasias.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu nunca reparo muito em mim mesmo.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu geralmente presto atenção aos meus sentimentos mais íntimos.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Estou constantemente examinando meus motivos.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Às vezes tenho a sensação de estar em algum lugar me observando.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu sou alerta a mudanças no meu humor.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tenho consciência de como minha mente funciona quando tento resolver um problema.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Geralmente, não sou muito consciente sobre mim mesmo.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu me preocupo com a minha forma de fazer as coisas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu me preocupo com a forma como me apresento.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sou autoconsciente a respeito da minha aparência.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Frequentemente, me preocupo em passar uma boa impressão.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Uma das últimas coisas que faço antes de sair de casa é olhar no espelho.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Me preocupo com o que outras pessoas pensam de mim.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Normalmente, estou consciente da minha aparência.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Figure B-12

Considerando como você se sente com relação ao uso pessoal do Instagram e seus efeitos na saúde mental, selecione seu grau de concordância com cada uma das afirmativas abaixo.

## 18. Solidão \*

No Instagram, com que frequência você...

	Nunca	Raramente	Ocasionalmente	Frequentemente	Sempre
... se sente "em sintonia" com as pessoas ao seu redor?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... sente que te falta companhia?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... sente que não tem ninguém com quem contar?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... se sente sozinho(a)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... se sente parte de um grupo de amigos?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... sente que tem bastante em comum com as pessoas ao seu redor?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... sente que não é mais próximo a ninguém?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... sente que seus interesses e ideias não são compartilhados pelas pessoas ao seu redor?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... se sente extrovertido(a) e amigável?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... se sente próximo(a) das pessoas?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... se sente excluído(a)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... sente que os seus relacionamentos com os outros não são significativos?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... sente que ninguém te conhece bem?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... se sente isolado(a) dos outros?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Figure B-13

## 19. Auto-Estima \*

Na escala, considere que 1. **Discordo totalmente** e 5. **Concordo totalmente**.

	1	2	3	4	5
No geral, estou satisfeito(a) comigo mesmo(a).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Às vezes penso que não sirvo para nada.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu sinto que tenho uma série de boas qualidades.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sou capaz de fazer coisas tão bem quanto a maioria das outras pessoas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu sinto que não tenho muito do que me orgulhar.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu certamente me sinto inútil às vezes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu sinto que sou uma pessoa de valor, pelo menos tanto quanto as outras.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu queria ter mais respeito por mim mesmo(a).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
No geral, eu me inclino a pensar que sou um fracasso.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu tenho uma atitude positiva comigo mesmo(a).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Figure B-14

20. Bem-Estar \*

Na escala, considere que 1. **Discordo totalmente** e 5. **Concordo totalmente**.

	1	2	3	4	5
Eu gosto da maior parte da minha personalidade.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quando olho para a história da minha vida, fico satisfeito(a) com como as coisas resultaram até agora.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Algumas pessoas perambulam sem objetivos pela vida, mas eu não sou uma delas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
As demandas do dia a dia frequentemente me derrubam.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De muitas maneiras me sinto decepcionado(a) com as minhas conquistas na vida.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Manter relacionamentos próximos tem sido difícil e frustrante pra mim.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu vivo a vida um dia de cada vez e não penso realmente no futuro.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Geralmente, eu me sinto em controle da situação na qual eu vivo.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sou bom(boa) em gerenciar as responsabilidades do dia a dia.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Às vezes sinto que já fiz tudo que tinha pra fazer na vida.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Para mim, a vida tem sido um processo contínuo de aprendizado, mudança e crescimento.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu acho importante ter novas experiências que desafiam a forma como penso sobre mim e o mundo.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
As pessoas me descreveriam como uma pessoa generosa, disposta a dividir meu tempo com os outros.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu já desisti de fazer grandes melhorias ou mudanças na minha vida há muito tempo.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu tendo a ser influenciado(a) por pessoas com opiniões fortes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu não tive muitas experiências de relacionamentos calorosos e confiáveis com outras pessoas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu tenho confiança nas minhas próprias opiniões, mesmo que elas sejam diferentes da forma como a maioria das pessoas pensa.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu me julgo pelo que eu acho importante, não pelos valores do que outros acham ser importante.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Figure B-15

21. Auto-Apresentação \*

Na escala, considere que 1. **Discordo totalmente** e 5. **Concordo totalmente**.

	1	2	3	4	5
Eu posto fotos no Instagram que mostram apenas o meu lado feliz.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu seletivamente posto fotos nas quais estou me divertindo.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu só posto mensagens que me retratam como alguém feliz, independente dos meus sentimentos verdadeiros.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu uso muitos emoticons sorridentes (ex. ☺), independente dos meus sentimentos verdadeiros.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ao atualizar meu Instagram, eu evito escrever sobre coisas negativas que me aconteceram.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quando eu atualizo meu status no Instagram, eu só revelo sentimentos positivos.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu posto fotos que mostram o meu lado verdadeiro.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu não me importo de mostrar as coisas ruins que me acontecem quando atualizo meu status no Instagram.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu mostro livremente as emoções negativas que eu sinto (ex. tristeza, ansiedade, ou raiva).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu não me importo de postar fotos nas quais eu não pareço feliz.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Figure B-16

22. Ansiedade \*

No Instagram...

	Nunca	Raramente	Ocasionalmente	Frequentemente	Sempre
Eu me sinto ansioso(a) com o fato de que outras pessoas podem me achar estranho(a).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu me preocupo em ser ridicularizado(a) pelos outros pelo conteúdo que compartilhei.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu me preocupo com o fato de que o conteúdo que compartilhei não será do agrado dos demais.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu tenho medo que meus amigos próximos não aprovem meu comportamento.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu me sentiria desconfortável se meus amigos expressassem publicamente que não gostam do conteúdo que compartilhei.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu me preocupo com a desaprovação dos outros pelo meu comportamento.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu me preocupo em ser julgado(a) pelos meus amigos, pelo conteúdo que compartilhei, em frente a outras pessoas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A possibilidade de ter minhas informações privadas em poder dos outros me causa ansiedade.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A possibilidade de ter informação privada minhas compartilhadas publicamente me causa ansiedade.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu me sinto desconfortável quando meus amigos compartilham minhas informações privadas com pessoas que não conheço.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu ficaria preocupado(a) se meu espaço pessoal fosse acessado sem meu consentimento.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu fico ansioso pela forma como as empresas/executivos das redes sociais lidam com regras de privacidade que afetam minha vida.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu me sinto ansioso(a) ao conversar com alguém que acabei de conhecer.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu me sinto nervoso(a) quando converso com pessoas que não conheço direito.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu me sinto desconfortável ao fazer novas amizades.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu me sinto tenso(a) ao encontrar alguém pela primeira vez.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tenho medo de interagir com outras pessoas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu fico nervoso(a) quando tenho que conversar com os outros sobre mim.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu me sinto ansioso(a) de causar uma impressão negativa nas pessoas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu me preocupo de as pessoas pensarem mal de mim.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu me sinto ansioso(a) de não ser capaz de corresponder às expectativas das pessoas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Figure B-17

23. Qual seu sexo? \*

- ☐ Feminino
- ☐ Masculino

24. Qual a sua idade, em anos? \*

 Enter answer 

25. Qual a sua renda familiar mensal? \*

- ☒ Até R\$ 2.090,00
- ☐ R\$ 2.090,01 a R\$ 4.180,00
- ☐ R\$ 4.180,01 a R\$ 10.450,00
- ☐ R\$ 10.450,01 a R\$ 20.900,00
- ☐ R\$ 20.900,01 ou mais

**Figure B-18**

Os dados solicitados abaixo não serão usados como identificador para as respostas previamente oferecidas, servindo apenas para evitar respostas duplicadas e como forma de contato para notificação do resultado do sorteio (caso você opte por participar).

26. Usuário no Instagram (@) (obrigatório para o sorteio)

Enter answer

---

27. Número de Celular (obrigatório para o sorteio)

Enter answer

---

28. Endereço de E-mail \*

Enter answer

---

29. Você gostaria de receber por e-mail a publicação do trabalho resultante desta pesquisa? \*

☐ Sim

☐ Não

30. Nome completo (opcional)

Enter answer

---

**MUITO OBRIGADA PELA PARTICIPAÇÃO!**

## ANNEX

Annex 1: E-mail exchange with Sogang University's Professor Jung-Hyun Kim, author of the Self-Presentation scales used in this study

G

Gabriele A. de Almeida

Fri 12/4/2020 10:40 PM

To: [REDACTED]

Cc: Luis Hernan Contreras Pinochet

↩ ↶ → ...

Dear Kim,

Hope this e-mail finds you well.

First of all, I must congratulate you on your fantastic research published in 2011: The Facebook Paths to Happiness: Effects of the Number of Facebook Friends and Self-Presentation on Subjective Well-Being. It's been almost 10 years that you got published and now that I am doing my own research on similar topics for the Federal University of Sao Paulo (Unifesp) in Brazil, I stumbled upon it and enjoyed the insights it provided me.

I would love to mention your work on my research and ask if you could share the index you used for measuring Honest self-presentation and Positive self-presentation.

Hope to hear from you soon,

Gabriele

JK

Jung-Hyun Kim

Sat 12/5/2020 3:18 AM

To: You

↩ ↶ → ...

pdf

PSP-HSP-Perceived Support.p...

46 KB